



Derbyshire County Council.

ANNUAL REPORTS

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

AND

SCHOOL MEDICAL OFFICER,

For the Year 1926,

BY

W. M. ASH,

M.B., B.S. (LOND.), F.R.C.S. (ED.), D.P.H. (VICT.),

COUNTY MEDICAL OFFICER OF HEALTH,

AND

SCHOOL MEDICAL OFFICER.

DERBY:

J. W. SIMPSON AND SONS. LTD., PRINTERS, FRIAR GATE.

*To the Chairman and Members of the
Derbyshire County Council and the
Derbyshire Education Committee.*

MY LORDS, LADIES AND GENTLEMEN,

I have the honour to present the Thirty-seventh Annual Report on the health of the County of Derby and the Twentieth Annual Report on the work of the School Medical Service.

The Ministry of Health in 1925 requested that the Annual Reports of Medical Officers of Health for that year should take the form of a "Survey" Report dealing with the Public Health activities of their areas, and that such Survey Reports should be issued at the end of each period of five years. In accordance with this request my Report for last year was a "Survey" Report. The next Survey Report of such a nature will be that for 1930. Unless these five-yearly Survey Reports are to contain matters which will be merely repetition of the interim reports, it appears to me that the latter should be curtailed so as to contain reference to matters of outstanding importance and statistics for the year under review. The need for economy in every direction possible would also suggest the application of that principle in the writing of the interim reports, and for these reasons I have thought it proper to limit this report to such matters as are specifically required by the Ministry of Health and the Board of Education, and such other matters as would tend to lose their interest if the mention of them were postponed until the next Survey Report. Also with the sanction of the Public Health Committee and the Education Committee I have arranged for my Annual Reports as Medical Officer of Health and School Medical Officer to be combined and published as one Volume, an arrangement which will result in a considerable monetary saving.

I have not set out in this interim report details of schemes which were fully described in last year's Survey Report, but where necessary, reference is made to that Report.

Reports on special subjects not specifically required by the Ministry of Health, have been inserted as appendices.

I am,

Your obedient Servant,

W. M. ASH,

*County Medical Officer of Health
and School Medical Officer.*

*New County Offices,
St. Mary's Gate, Derby,
July, 1927.*

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PUBLIC HEALTH STAFF.

COUNTY MEDICAL OFFICER Dr. W. M. Ash, M.B., B.S. (Lond.),
F.R.C.S. (Edin.), D.P.H. (Man.).

Chief Assistant County Medical Officer— Dr. I. C. Mackay, M.B., Ch.B. (Edin.),
D.P.H., R.C.P.S. (Edin.).

Medical Officers—

(a) Tuberculosis Officers Dr. B. S. Nicholson, M.D. (Glas.),
D.P.H. (St. Andrews).
Dr. P. Heffernan, B.A., M.B., B.Ch.,
B.A.O.

(b) Bacteriologist ... Dr. S. M. Ross, M.D. (Edin.), Ch., B.,
D.P.H. (Man.).

(c) Venereal Diseases Officer ... Dr. H. R. M. Richards, M.B., Ch.B.
(Edin.) (part-time).

(d) Med. Supt. at Walton San. ... Dr. A. N. Robertson, M.R.C.P. (Lond.),
M.D. (Edin.), D.P.H. (Camb.).

(e) Asst. Resident Med. Officer at Walton San. Dr. E. M. Burnett, M.B., B.S. (Lond.),
M.R.C.S. (Eng.), L.R.C.P. (Lond.),
D.P.H.

(f) Consulting Surgeon, Bretby Orthopædic Hospital ... Naughton Dunn, Esq., M.B., Ch.B.

(g) Asst. do. ... Dr. J. H. Moir, M.D., D.P.H., Ch.B.

Organiser of Infant Welfare Centres ... Miss E. Gray, C.M.B., S.I., &c.

County Sanitary Inspector H. Dickinson.

Assistant Bacteriologist C. F. Peekham.

Laboratory Assistants ... A. Morley, A. Yeomans and
C. Robertson.

Radiographer ... H. A. Waincott, M.S.R.

Chief Clerk ... T. O. Morrell.

Clerks ... H. R. Pedley, H. Richardson, F.
Beeston, H. Littlewood, H. Haddock
E. Eyre, E. J. Arnot, Miss Slim,
Miss Booth.

There are 11 part-time Officers in charge of Infant Welfare Centres. Details of these will be found in Table V.

LIST OF HEALTH VISITORS.

Name.	Qualification	Reference No.*	Date commenced duty.
Willatt, N. (Supt.)	... 2, 3	... ..	12/10/08
Gomm, G. E.	... 3, 4, 5, 6, 7, ...	... ..	1/9/08
Howes, C.	... 2, ...	... ..	16/10/09
Brabyn, F.	... 2, 3, (Ophthalmic Nurse)	... ..	6/1/13
Harvey, A.	... 2, 3, 5	... ..	1/9/13
Spetch, R.	... 2, 3	... ..	21/4/13
Fisher, D.	... 3, 4, 5, 6,	... ..	1/5/14
Rodgers, M.	... 3, 5, 6, 7	... ..	1/2/15
McNulty, A.	... 7, (Dispensary Nurse)	... ..	16/6/15
Wilson, M.	... 3, 4, 6, 7	... ..	12/7/15
Liddle, A. L.	... 3, 4, 5	... ..	27/9/15
Fisher, C. H.	... 3, 4, 5, 6	... ..	21/12/15
Siddons, B.	... 1, 3, 4, 5, 6	... ..	10/8/16
Orpin, C. A.	... 2, 3, 4, 6	... ..	5/2/17
Hughes, D. C.	... 3, 4, 5	... ..	27/2/17
Rose, J.	... 3, 4	... ..	3/3/17
Mason, M.	... 3, 7	... ..	1/5/17
Blood, W. S.	... 2, 3	... ..	1/9/17
Stevens, A. L.	... 2, 3	... ..	21/9/17
Webb, E.	... 3, 4	... ..	21/9/17
Field, C.	... 2, 3, 5, 6	... ..	1/10/17
Major, C. B.	... 2, 3	... ..	1/10/17
Hallows, E.	... 2, 3	... ..	17/2/18
Stevens, L.	... 2, 3, 5, 6	... ..	29/6/18
Wynne, E.	... 2, 3, ...	... ..	2/9/18
Martin, E.	... 3, 5, 7	... ..	10/9/18
Smith, M. L.	... 2, 3, 5	... ..	1/1/19
Clarkson, A. L.	... 3, 4, 5, 6, 7	... ..	18/3/19
Spencer, E. A.	... 2, 3, 5, 6	... ..	17/3/19
Williams, G.	... 3, 4, 5, 6,	... ..	1/4/19
Edwards, D.	... 2, 3, 5, 6	... ..	1/7/19
Woodford, D.	... 2, 3, 5	... ..	8/12/19
Booth, E.	... 3, 4, 5	... ..	16/8/20
Sleigh, F.	... 2, 3, 5, 6	... ..	6/9/20
Beardmore, B.	... 2, 3	... ..	25/10/20
Quinn, E.	... 2, 3, 5	... ..	20/10/20
Priestley, M.	... 2, 3	... ..	17/2/21
Nuttall, J.	... 3, 4	... ..	1/3/21
Agutter, M.	... 1, 3, 4	... ..	22/8/21
Brewster, C.	... 2 (Theatre Nurse)	... ..	1/9/21
Sterling, E. M.	... 3, 5	... ..	1/9/21
Millington, H.	... 2, 3	... ..	29/5/22
Latham, B. A.	... 2, 3, 5,	... ..	9/10/22
Hinchliffe, M. I.	... 2, 3	... ..	21/3/23
Clark, M.	... 1, 3	... ..	8/1/24
Wood, Irene M.	... 2, 3, 7	... ..	19/2/24
White, G.	... 2, 3, 7	... ..	25/3/24
Watson, E.	... 2, 3	... ..	27/3/24
Sheldon, F.	... 1	... ..	5/1/25
Bidmead, V.	... 3, 4, 5, 7	... ..	21/5/25
Dennis, S.	... 2, 3	... ..	23/3/25
Freeman, E.	... 2, 3, 7	... ..	22/3/26
Wall, J. F.	... 2, 3	... ..	10/5/26
Valentine, I.	... 2, 3	... ..	5/4/27
Halliday, M. T.	... 2, 3	... ..	5/4/27

With the exceptions indicated all the Health Visitors act as Visitors under the M. & C.W. and Tuberculosis schemes, as Mental Deficiency Act Visitors, as Assistant Inspectors of Midwives, and as School Nurses in the area of the County allocated to them. In addition certain nurses take duty at Tonsil & Adenoid, Ear, and Dental Clinics, and also Tuberculosis Dispensaries.

Four members of the staff have not the C.M.B. certificate, and the inspection of midwives is not therefore included in their duties.

- *1. H. V. Cert. (Approved Ministry of Health).
2. Trained Nurse.
3. Certificate of the Central Midwives Board.
4. Sanitary Inspector.
5. H. V. Cert. of Royal Sanitary Institute.
6. Maternity and Child Welfare Works Certificate, Royal Sanitary Institute.
7. Fever Nursing or other special nursing.

TABLE I.

Birth Rate and Death Rate from the Seven Principal Zymotic Diseases and all Causes and Infantile Mortality in the Whole County during the last Thirty-Six Years.

Year.		DEATH RATES PER 1,000 OF POPULATION.								Death Rate from all Causes.	Birth Rate.	Infantile Mortality per 1,000 Births.
		Small Pox.	Scarlatina	Diphtheria & Membranous Croup.	Typhoidal Fevers.	Measles.	Whooping Cough.	Diarrhoea	Seven Principal Zymotics			
1891 to 1900	WHOLE COUNTY ...	.028	.16	.17	.16	.43	.30	.58	1.87	17.1	33.7	147
	England and Wales ...	.012	.15	.27	.18	.39	.36	.71	2.14	18.3	29.9	153
1901 to 1910	WHOLE COUNTY ..	.004	.10	.16	.08	.26	.24	*.58	*1.58	14.1	28.5	126
	England and Wales ..	.016	.10	.17	.10	.30	.27	.77	1.50	15.3	27.1	128
1911 to 1920	WHOLE COUNTY ..	—	.04	.16	.03	.24	.16	.40	1.03	12.66	24.07	99
	England and Wales ..	.000	.04	.14	.03	.27	.18	.51	1.17	13.85	21.90	100
1921	WHOLE COUNTY ...	—	.02	.07	.01	.04	.10	†.26	.50	11.16	24.48	77
	England and Wales ...	.00	.03	.12	.02	.06	.12	†.34	.69	12.1	22.4	83
1922	WHOLE COUNTY ...	—	.02	.07	.003	.05	.14	†.13	.41	10.78	21.97	72
	England and Wales ...	.00	.04	.11	.01	.15	.16	†.13	.60	12.9	20.6	77
1923	WHOLE COUNTY ...	—	.01	.04	.01	.13	.14	†.14	.47	10.72	21.13	75
	England and Wales ...	.00	.03	.07	.01	.14	.10	†.15	.50	11.6	19.7	69
1924	WHOLE COUNTY ...	.00	.01	.05	.01	.06	.09	†.13	.35	11.00	20.75	70.5
	England and Wales ...	.00	.02	.06	.01	.12	.10	†.14	.45	12.2	18.8	75
1925	WHOLE COUNTY ...	.00	.03	.09	.00	.11	.12	†.10	.45	11.45	20.42	78.4
	England and Wales ...	.00	.03	.07	.01	.13	.15	†.15	.54	12.2	18.3	75
1926	Urban Districts ...	—	.03	.06	.00	.06	.15	†.09	.39	10.68	18.83	72.6
	Rural Districts ...	—	.02	.06	.01	.08	.16	†.14	.47	10.47	19.67	69.4
	WHOLE COUNTY ...	—	.03	.06	.01	.07	.15	†.11	.43	10.57	19.23	71.1
	England and Wales ....	.00	.02	.07	.01	.09	.10	†.15	.44	11.6	17.8	70

* Since 1901 the Deaths from Enteritis, etc., are included.

† Deaths from Diarrhoea under 2 years of age only.

Report on the Health of Derbyshire for the Year 1926.

PART I.

THE COUNTY AS A WHOLE.

STATISTICS AND SOCIAL CONDITIONS.

AREA.

The Administrative County of Derby comprises 40 Sanitary Districts, of which 4 are Municipal Boroughs, 21 Urban Districts and 15 Rural Districts. The County has a total area of 645,097 acres, 92,801 of which fall within the Urban Districts, and 552,296 in the Rural Districts. This acreage includes inland waters.

POPULATION.

The population of the Administrative County, as estimated by the Registrar-General for the year 1926, is 615,800. Of this population, 320,100 are resident in the Boroughs and Urban Districts and 295,700 in the Rural Districts. The population of each Sanitary District is given in Tables II and IIa.

INHABITED HOUSES.

The number of "Structurally Separate Dwellings" in the Administrative County at the time of the Census 1921 was 124,663, the number of private families being 130,139.

The estimated number of houses at the end of 1926 was 138,514, of which 71,600 are in Boroughs and Urban Districts and 66,914 in the Rural Districts. During the year 3,587 new houses were erected.

Separate particulars relating to Housing are given in Table IX. facing page 40.

RATEABLE VALUE.

The Rateable (or Assessable) Value of the Administrative County for County Rate purposes is £3,161,564. A Penny Rate over the whole County represents the sum of £13,173.

PHYSICAL FEATURES AND CHIEF OCCUPATIONS.

See Survey Report, 1925, pages 9 and 10.

VITAL STATISTICS.

The Vital Statistics relating to each District in the County for the year under review are given in Tables II. and IIA, and the following are extracts from them, given in a form required by the Ministry of Health :—

		Total.	Males.	Females.	Rate per 1,000 of population.
Births	{ Legitimate	11,392	5,811	5,581	19·23
	{ Illegitimate	453	227	226	
Deaths		6,512	3,381	3,131	10·57
No. of women dying in or in consequence of childbirth			From sepsis		18.
			From other causes		36.
Deaths of infants under 1 year of age per 1,000 births :—					
Legitimate, 69·0 ; Illegitimate, 123·5 ; Total 71·1.					
Deaths from Measles (all ages) 42					
Deaths from Whooping Cough (all ages) ... 96					
Deaths from Diarrhœa (under 2 years of age) 68					

Infantile Mortality.—It will be seen that there is a very substantial fall in infant mortality, the rate having dropped from 78·4 in 1925 to 71·1 in 1926.

Deaths.—6,512 deaths occurred during the year, giving a death-rate of 10·57 per thousand of the population—appreciably less than the rate for the previous year which was 11·45.

Births.—The Birth-Rate for the County continues to fall. There were 11,845 births during 1926, giving a birth-rate of 19·23 per thousand of the population, compared with 20·42, the rate for the previous year, whilst for the Country as a whole the birth-rate fell from 18·3 in 1925 to 17·8 in 1926. The legitimate births in Derbyshire number 11,392, and the illegitimate, 453.

Zymotic Diseases.—The Zymotic Death-Rate for the year was 0·43 per thousand of the population, as compared with 0·45, the rate for 1925.

GENERAL PROVISION OF HEALTH SERVICES.

HOSPITALS PROVIDED OR SUBSIDIZED BY THE
COUNTY COUNCIL.

Fever Hospitals.—In August, 1926, the Ministry of Health issued a Circular to Local Authorities and Isolation Hospital Committees, requesting them to fill up a schedule giving details of the accommodation etc., at the various hospitals. A summary of the main items given in the completed Schedules returned from the 10 Isolation Hospitals within the County provided under the Isolation Hospitals Act is set out in the following Table :—

Table II.

COUNTY OF DERBY. Year ending December 31st. 1926.

Table giving the Birth Rates and the Death Rates from several causes, in each of the URBAN Sanitary Districts of the County.

URBAN SANITARY DISTRICT.	MEDICAL OFFICER OF HEALTH.	AREA in acres (Land and Water).	POPULATION.				Estimated Population 1926.	BIRTHS.	DEATHS.	Annual Rates per 1,000 of Estimated Population.							Infantile Death Rate per 1,000 Births
			Census. 1911	Census. 1921	Ratio 1921 to 1911 Percent- age.	Corrected Population 1921. *				Birth Rate.	Death Rate.	Zymotic Death Rate.	Death Rate from continued Fever and Diarrhoeal Diseases (under 2 years)	Phthisis Death Rate.	Respiratory Death Rate.		
ALFRETON	S. O. Bingham, M.R.C.S....	4,626	19,046	20,472	108	20,800	21,970	432	210	19·66	9·55	·13	...	·31	1·04	60·1	
ALVASTON AND BOULTON	C. F. Druitt, M.R.C.S., L.R.C.P.	1,591	1,398	1,620	115	1,632	1,686	36	22	21·35	13·05	...	...	...	2·25	166·7
ASHBOURNE... ..	E. A. Sadler, M.D. ...	573	4,059	4,144	102	4,166	4,625	69	45	14·92	9·72	...	...	·21	·21	43·4
BAKEWELL	C. W. Evans, M.B. ...	3,061	3,078	3,064	99	2,964	3,002	56	27	18·65	8·99	·66	...	...	·99	17·8
BASLOW AND RUBNELL	T. Fentem, M.D., D.P.H.	5,634	858	866	101	811	854	12	4	14·05	4·63	...	...	...	...	83·3
BELPER	R. C. Allen, M.R.C.S., D.P.H.	3,133	11,640	12,324	104	12,330	12,990	209	123	16·09	9·46	·30	...	·61	·69	62·1	
BOLSOVER	W. Stratton, L.R.C.P.I. ...	4,955	11,214	11,475	102	11,700	12,590	301	107	23·91	8·49	·16	...	·24	1·42	76·4	
BONSALL	A. G. Harvey, M.B. ...	2,447	1,248	1,167	94	1,170	1,186	16	14	13·49	11·80	·84	...	...	...	125·0
BRAMPTON AND WALTON	R. A. McCrea, M.B. ...	9,000	2,059	2,316	112	2,323	2,149	39	26	18·15	12·10	1·39	...	·93	·93	51·2	
BUXTON (Borough)... ..	T. B. Flint, M.R.C.S. ...	3,101	13,760	15,641	114	14,790	16,090	279	161	17·34	10·00	·19	...	·56	·80	53·7	
CHESTERFIELD (Borough)	R. P. Garrow, M.D., D.P.H.	8,474	55,309	61,232	111	62,400	66,650	1,396	741	20·94	11·12	·54	·12	·67	1·87	83·8	
CLAY CROSS	N. K. Sparrow, L.R.C.P.I. ..	1,467	8,365	8,686	104	8,840	9,194	230	103	25·01	11·20	1·19	·32	1·08	1·74	82·6	
DRONFIELD	O. H. Hudson, M.R.C.S. ...	1,045	3,943	4,434	112	4,448	4,399	94	51	21·37	11·59	·22	·22	·45	1·36	31·9	
GLOSSOP (Borough)... ..	E. H. M. Milligan, M.D., D.P.H.	3,052	21,688	20,531	95	20,870	19,490	260	278	13·34	14·26	·36	·10	·71	2·51	69·2	
HEAGE... ..	R. C. Allen, M.R.C.S., D.P.H.	2,367	3,474	3,740	107	3,801	4,443	73	30	16·43	6·75	...	...	·22	·67	54·7
HEANOR	W. H. Turton, M.B. ...	3,509	19,851	21,436	108	21,870	21,680	411	246	18·96	11·35	·46	·09	·78	1·79	72·9	
ILKESTON (Borough)	R. de V. King, M.R.C.S., D.P.H.	2,526	31,657	32,266	102	32,980	32,960	683	342	20·72	10·38	·57	·21	·57	2·48	83·4	
LONG EATON	C. Herington, M.B., B.S., D.P.H.	3,323	19,207	19,489	102	20,499	21,750	352	255	16·18	11·72	·36	·13	·91	1·47	85·2	
MATLOCKS	J. Moir, M.B. ...	7,001	10,343	10,545	102	9,555	9,654	133	138	14·29	14·29	·20	...	·62	1·96	72·4	
NEW MILLS	H. Fleming, M.B. ...	5,204	8,998	8,490	94	8,590	8,901	118	100	13·25	11·23	·11	·11	·22	1·23	67·8	
NORTH DARLEY	S. E. Morton, M.R.C.S. ...	5,142	3,317	3,264	98	3,219	3,729	72	39	19·31	10·46	·53	...	·53	·26	83·3	
RIPLEY	R. A. Ryan, L.R.C.P.I. ...	2,815	11,848	13,292	112	13,560	13,890	254	115	18·29	8·28	·14	...	·50	1·08	59·0	
SOUTH DARLEY	J. L. Fletcher, M.B. ...	2,008	809	740	91	731	675	11	6	16·29	8·88	...	...	1·48	...	...
SWADLINCOTE	S. T. Cochrane, M.D. ...	3,670	13,674	20,012	107	20,440	21,590	410	190	18·99	8·80	·23	·04	·46	·92	63·4	
WIRKSWORTH	E. D. Broster, M.R.C.S., L.R.C.P.	3,027	3,888	3,610	93	3,606	3,953	77	46	19·48	11·64	·25	...	·50	·75	38·9	
TOTAL		92,801	289,731	304,855	105	302,095	320,100	6,028	3,419	18·83	10·68	·38	·09	·58	1·54	72·6	

* Corrected by Registrar-General for holiday movement

COUNTY OF DERBY.

Year ending December 31st, 1926.

Table IIa.

Table giving the Birth Rates and the Death Rates from several causes, in each of the RURAL Sanitary Districts of the County.

RURAL SANITARY DISTRICT.	MEDICAL OFFICER OF HEALTH.	AREA in Acres (Land and Water).	POPULATION.				Estimated Population 1926.	BIRTHS.	DEATHS.	ANNUAL RATES PER 1,000 OF ESTIMATED POPULATION.							Infantile Death Rate per 1,000 Births.
			Census 1911.	Census 1921.	Ratio 1921 to 1911 Percentage	Corrected Population 1921. *				Birth Rate.	Death Rate.	Zymotic Death Rate.	Death Rate from continued Fevers and Diarrhoeal Diseases.	Phthisis Death Rate.	Respiratory Death Rate.		
ASHBOURNE	H. H. Hollick, M.R.C.S.	70,380	10,294	10,367	101	10,300	10,390	184	127	17·71	12·22	·28	·09	·38	1·34	70·6	
BAKEWELL	T. Fentem, M.D., D.P.H.	81,772	18,461	18,666	100	18,100	18,330	312	230	17·02	12·54	·16	...	·65	1·30	41·6	
BASFORD	W. H. Parkinson, M.D., D.P.H.	3,569	1,450	1,481	102	1,504	1,720	32	14	18·60	8·14	...	...	...	1·16	...
BELPER	R. Morrison, L.R.C.P. & S.	50,357	23,586	23,494	100	23,620	24,270	389	271	16·03	11·16	·37	·09	·53	1·56	71·9	
BLACKWELL	A. H. Wear, M.B., B.S., D.P.H.	21,237	39,306	41,880	107	42,450	46,660	1,122	457	24·04	9·79	·85	·38	·51	1·86	86·4	
CHAPEL-EN-LE-FRITH	G. Cochrane, M.B., D.P.H.	80,389	16,935	16,144	95	15,890	16,300	255	180	15·64	11·04	·67	·55	·30	1·47	82·3	
CHESTERFIELD	H. Peck, M.D., D.P.H.	68,068	71,653	76,143	106	77,000	81,920	1,788	879	21·82	10·73	·56	·08	·62	1·96	73·2	
CLOWN	W. Spencer, L.R.C.P.	13,428	17,844	17,506	98	17,730	18,470	387	150	20·95	8·12	·43	·11	·54	1·24	69·7	
GLOSSOP DALE	E. H. M. Milligan, M.D., D.P.H.	17,891	4,009	3,780	94	3,810	3,748	45	58	12·01	15·47	·26	·26	...	2·40	88·8	
HARTSHORNE AND SEALS	R. W. Logan, M.R.C.S.	11,479	7,939	8,598	108	8,720	8,665	142	92	16·39	10·62	·46	·11	·23	1·15	84·4	
HAYFIELD	G. B. Pemberton, M.B.	10,232	5,170	4,520	87	4,413	4,349	52	48	11·96	11·04	...	...	·68	1·84	96·1
NORTON	C. Aldis, M.B., B.S.	8,738	3,919	4,639	118	4,570	4,762	70	66	14·70	13·86	...	...	·84	·63	142·8
REPTON	A. H. Holmes, M.D.	54,273	16,133	16,500	102	16,420	17,600	337	160	19·15	9·09	·28	·05	·22	·73	47·4	
SHARDLOW	S. Hunt, M.R.C.S.	43,134	30,900	33,755	109	33,501	36,020	656	340	18·21	9·43	·24	·02	·47	1·05	53·3	
SUDBURY	G. H. Herbert, M.R.C.S.	17,299	2,683	2,537	94	2,509	2,496	46	21	18·43	8·41	...	...	...	1·20	21·7
RURAL DISTRICTS		552,296	270,282	280,010	104	280,537	295,700	5,817	3,093	19·67	10·47	·47	·14	·50	1·54	69·4	
URBAN DISTRICTS		92,801	289,731	304,856	105	308,095	320,100	6,028	3,419	18·83	10·68	·38	·09	·58	1·54	72·6	
WHOLE COUNTY		645,097	560,013	584,866	104	588,632	615,800	11,845	6,512	19·23	10·57	·42	·11	·54	1·54	71·1	

* Corrected by Registrar-General for holiday movement.

TABLE III.

DETAILS	BELPER.	CHESTERFIELD.	DROSFIELD.	MARTIN MOOR.	MORTON.	LANGWITL.	HIGH PEAK.	SHARDLOW.	REPTON.	LEKESTON.
Population served Estimated 1926... Method of Construction ...	81,516 Brick, Wood & Corrugated Zinc	68,799 Brick and Corrugated Iron	Brick	177,995	Brick	Brick	29,550 Stone, Wood & Corrugated Iron	59,456 Brick	22,958 Brick	32,960 Wood or Brick Pie
Sewage ...	Own Works	To Corporation Sewers	To Dronfield U.D. Sewer	Filter	Filter	Irrigation	To Public Sewers	Own Works	Own Works	To Public Sewers
Heating ...	Central Coal Fires	Open Fires Electricity & Oil	Central & Open Coal Fires	Central & Open Fires	Central & Open Fires	Central Stoves	Radiators	Coal & Gas	Central	Radiators & Gas Stoves
Lighting ...	Gas		Gas	Gas	Gas	Gas	Gas	Gas	Electricity	Gas
No. of Wards ...	8	17	7	6	7	5	8	6	6	4
No. of Beds ...	50	64	18	18	18	24	26	24	32	22
Discharge Block ...	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Diseases Treated ... Nursing & Domestic Staff accommodated	S.F., D., E., S.P. 12	S.F., D., E., S.P. 24	S.F., D., E. 11	S.F., D., E. 11	S.F., D., E. 14	S.F., D., E. 11	S.F., D., E., S.P. 19	S.F., D., 12	S.F., D., E., S.P. 9	S.F., D., E. 6
Laundry ...	Power	Power Manlove- Alliott	Hand	Hand	Hand	Hand	Power & Hand	Power & Hand	Hand	Hand
Disinfecting Apparatus ...	Thresh	Motor	Thresh	Thresh	Thresh To be provided shortly	Thresh	Steam	Steam	Thresh	Lyons
Ambulance ...	Motor & Horse	Motor	Motor	Motor		Motor	Motor & Horse	Motor	Motor	Horse
Porter's Lodge ...	Yes	No	No	No	Yes	Yes	No	Yes	Yes	Yes

S.F. = Scarlet Fever. D. = Diphtheria. E. = Typhoid (Enteric). S.P. = Small Pox.

All the hospitals are connected with the public telephone ; all have a mortuary, and all derive their water supply from public sources with the exception of the Etwall Hospital, whose supply is pumped from a well by a gas engine.

From the returns the accommodation for the nursing and domestic staff, and the kitchen and cooking arrangements, appeared to be adequate in each hospital except that of Ilkeston.

None of the Hospitals has a Resident Medical Officer.

All the Hospitals mentioned in the Table are provided under the Isolation Hospitals Acts : the Buxton Borough Council has its own Hospital which is not provided under these Acts.

Table IV. gives a Summary of the expenses at each hospital and Table V. shows the number of cases of infectious diseases removed to them.

The County Council gives grants towards the establishment expenses of Isolation Hospitals under conditions which were fully described in the Survey Report of 1925, pages 12 and 13.

Statistical information relating to the Isolation Hospitals is set out in Tables IV and V.

TABLE IV.

STATISTICAL INFORMATION RELATING TO ISOLATION HOSPITAL COMMITTEES APPLYING FOR A GRANT.

Year ended March 31st, 1926.

Name of Hospital.	Belper.	Chesterfield—Penmore.		Dronfield.	Mastin Moor.	Morton.	Langwith.	High Peak.	Shardlow.	Repton.	Ilkeston.											
		Infectious Diseases.	Tuberculosis.																			
Total Number of Beds in Hospital	50	60	18	26	27	32	30	46	38	36	25											
*Number of beds in accordance with Ministry's requirements ...	18	30	—	18	18	18	24	16	18	18	10											
Population of Hospital District 1926... ..	81,516	68,799		177,995				29,550	59,456	22,958	32,960											
Cases Admitted during year ended March 31st, 1926 :—																						
Scarlet Fever	159	234	—	125	112	175	167	99	163	129	11											
Diphtheria	50	81	—	39	64	46	45	45	63	14	1											
Typhoid Fever	2	2	—	9	3	—	2	6	—	—	1											
Other Diseases	9	13	36	1	1	67‡	1	—	—	4	68‡											
TOTAL	220	330	36	174	180	288	215	150	226	147	81											
Average number of patients in Hospital each day	22	38·5	13·4	16	17·8	24	21·4	19	16	16	5·3											
Permanent Staff residing in Hospital	9	17	5	9	10	14	11	11	13	7	6											
Non-resident Staff in addition to Clerk and Doctor	1	2	1	1	1	—	1	4	1	2	1											
Average number of days each case in Hospital	24·7	40·4	93·8	32	35	31	35	44	34	41·4	21·7											
SUMMARY OF EXPENDITURE :—																						
	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.
	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.
1. Provisions	836	14 7	847	8 11	648	18 6	382	9 2	452	9 9	580	9 3	514	9 3	714	14 5	766	18 5	534	12 10	391	1 8
2. Drugs and Medical Appliances	125	2 2	114	1 2	28	10	27	8	27	7	31	6	49	11	87	1 9	125	3 0	48	1 2	31	2
3. Furniture, Linen, &c.	432	7 7	676	7 2	43	1 3	154	3 9	290	6 3	214	3 5	253	4 6	386	7 10	521	12 6	280	6 9	46	3
4. Fuel	424	7 5	602	6 4	104	3 0	138	3 4	150	3 3	232	3 9	161	2 11	327	6 7	392	9 5	173	4 2	134	9
5. Salaries	1,319	1 3 1	1,526	16 1	448	12 10	753	18 1	743	16 0	753	12 1	824	14 10	1,068	1 1 7	864	1 0 9	658	15 9	458	1 13
6. Administration	326	5 8	413	4 4	65	1 10	230	5 6	221	4 9	231	3 8	205	3 8	253	5 2	203	4 10	218	5 3	89	6
7. Renewals and Repairs	390	6 10	1,601	16 11	135	2 2	223	4 0	75	1 10	11	...
8. Loans—Repayment and Interest	387	6 9	978	10 4	368	8 10	375	8 1	457	7 4	485	8 8	584	11 10	533	12 10	387	9 3
9. Transport	219	3 10	46	6	7	2	15	4	49	1 1	88	1 5	11	2	83	1 8	44	1 1	31	9	21	1
10. Miscellaneous	31	6	44	6	20	6
TOTALS	4,489	3 18 5	6,847	3 12 3	1,343	1 18 5	2,067	2 9 8	2,307	2 9 9	2,721	2 3 7	2,725	2 8 11	3,502	3 10 10	3,523	4 4 8	2,349	2 16 5	1,181	4 5
Provisions (Patients and Staff) per head per week	10 5	5 10		13 4	5 10		6 3	5 10		6 1	9 1		10 1		8 11		13 3					
Name of Medical Superintendent	R. C. Allen	R. P. Garrow		H. Peck		N. Kennedy		C. H. Latham		A. H. Holmes		R. de V. Ke										
Name of Clerk	G. Pym	P. Morris.		W. E. Wakerley		W. B. Bunting		J. Spencer		H. S. Askew		W. E. Veas										
Grant due in accordance with Reports of Council, April 17th, 1907, and July 7th, 1920.	300 0 0	480 0 0		1,200 0 0		270 0 0		297 0 0		297 0 0		143 0 0										

March, 1927.

*County Council Grant only given for one bed in accordance with the Ministry's requirements per 2,000 of Population.

† 45 Smallpox cases.

‡ 66 Smallpox Cases.

TOTAL EXPENDITURE ON DERBYSHIRE ISOLATION HOSPITALS = £31,711.

TOTAL GRANTS (INCLUDING £30 FOR HADDON JOINT HOSPITAL COMMITTEE) = £3,017 0s. 0d.

W. M. ASH,

JOHN HUNT.

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

Amount of

TABLE V.

**CASES OF INFECTIOUS DISEASES NOTIFIED WITHIN THE FOLLOWING
HOSPITAL DISTRICTS.**

NORTH DERBYSHIRE HOSPITAL DISTRICT.

DISTRICT.	Estimated Population, 1926.	SMALL- POX.		SCARLET FEVER.		DIPHTH- ERIA.		ENTERIC FEVER.		TOTALS.	
		No. no.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.
Bolsover U. ..	12590	19	19	44	22	21	12	—	—	84	53
Clay Cross U. ..	9194	—	—	10	9	1	1	—	—	11	10
Dronfield U. ..	4399	—	—	4	4	3	3	—	—	7	7
Blackwell R. ..	46660	47	47	120	109	62	53	4	4	233	213
Chesterfield R. ..	81920	5	5	238	198	120	94	4	4	367	301
Crowne R. ..	18470	—	—	73	69	45	40	1	1	119	110
Norton R. ..	4762	—	—	13	6	—	—	—	—	13	6
<i>Totals</i> ..	177995	71	71	502	417	252	203	9	9	834	700

CHESTERFIELD HOSPITAL DISTRICT.

Brampton & Walton U. ..	2149	—	—	2	1	—	—	—	—	2	1
Chesterfield Boro' ..	66650	2	2	343	245	109	84	—	—	454	331
<i>Totals</i> ..	68799	2	2	345	246	109	84	—	—	456	332

BELPER HOSPITAL DISTRICT.

Alfreton U. ..	21970	2	2	40	8	16	—	—	—	58	10
Belper U. ..	12990	70	70	18	15	15	15	—	—	103	100
Heage U. ..	4443	39	39	4	4	—	—	1	1	44	44
Ripley U. ..	13890	9	9	31	13	6	3	—	—	46	25
Wirksworth U. ..	3953	1	1	12	10	—	—	—	—	13	11
Belper R. ..	24270	8	8	42	36	14	9	2	1	66	54
<i>Totals</i> ..	81516	129	129	137	86	51	27	3	2	330	244

ILKESTON HOSPITAL DISTRICT.

Ilkeston Boro' ..	32960	—	—	38	35	—	—	—	—	38	35
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SHARDLOW HOSPITAL DISTRICT.

Alvaston & Boulton U. ..	1686	1	1	5	—	5	5	—	—	11	6
Long Eaton U. ..	21750	—	—	136	103	37	32	—	—	173	135
Shardlow R. ..	36020	10	10	85	57	27	17	3	1	125	85
<i>Totals</i> ..	59456	11	11	226	160	69	54	3	1	309	226

REPTON HOSPITAL DISTRICT.

DISTRICT.	Estimated Population. 1926.	SMALL- POX.		SCARLET FEVER.		DYPHTH- TERIA		ENTERIC FEVER.		TOTALS.	
		No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.
Ashbourne R. (certain Parishes only)	2862	—	—	7	—	—	—	2	—	9	—
Repton R. ..	17600	1	1	125	106	9	5	1	—	136	112
Sudbury R. ..	2496	—	—	2	2	—	—	—	—	2	2
<i>Totals</i> ..	22958	1	1	134	108	9	5	3	—	147	114

HADDON HOSPITAL DISTRICT.

Bakewell U. ..	3002	—	—	20	19	—	—	—	—	20	19
Baslow U. ..	854	—	—	—	—	1	—	—	—	1	—
Bonsall U. ..	1186	—	—	—	—	1	—	—	—	1	—
Matlocks U. ..	9654	—	—	7	4	2	—	1	—	10	4
North Darley U. ..	3729	—	—	1	1	3	—	—	—	4	1
South Darley U. ..	675	—	—	—	—	—	—	—	—	—	—
Bakewell R. ..	18330	—	—	43	5	2	—	—	—	45	5
<i>Totals</i> ..	37430	—	—	71	29	9	—	1	—	81	29

HIGH PEAK HOSPITAL DISTRICT.

New Mills U. ..	8901	—	—	14	11	10	8	—	—	24	19
Chapel R. ..	16300	—	—	51	47	5	4	—	—	56	51
Hayfield R. ..	4349	—	—	3	2	6	3	—	—	9	5
<i>Totals</i> ..	29550	—	—	68	60	21	15	—	—	89	75

BUXTON HOSPITAL DISTRICT.

Buxton (Boro') ..	16090	—	—	11	11	4	4	1	1	16	16
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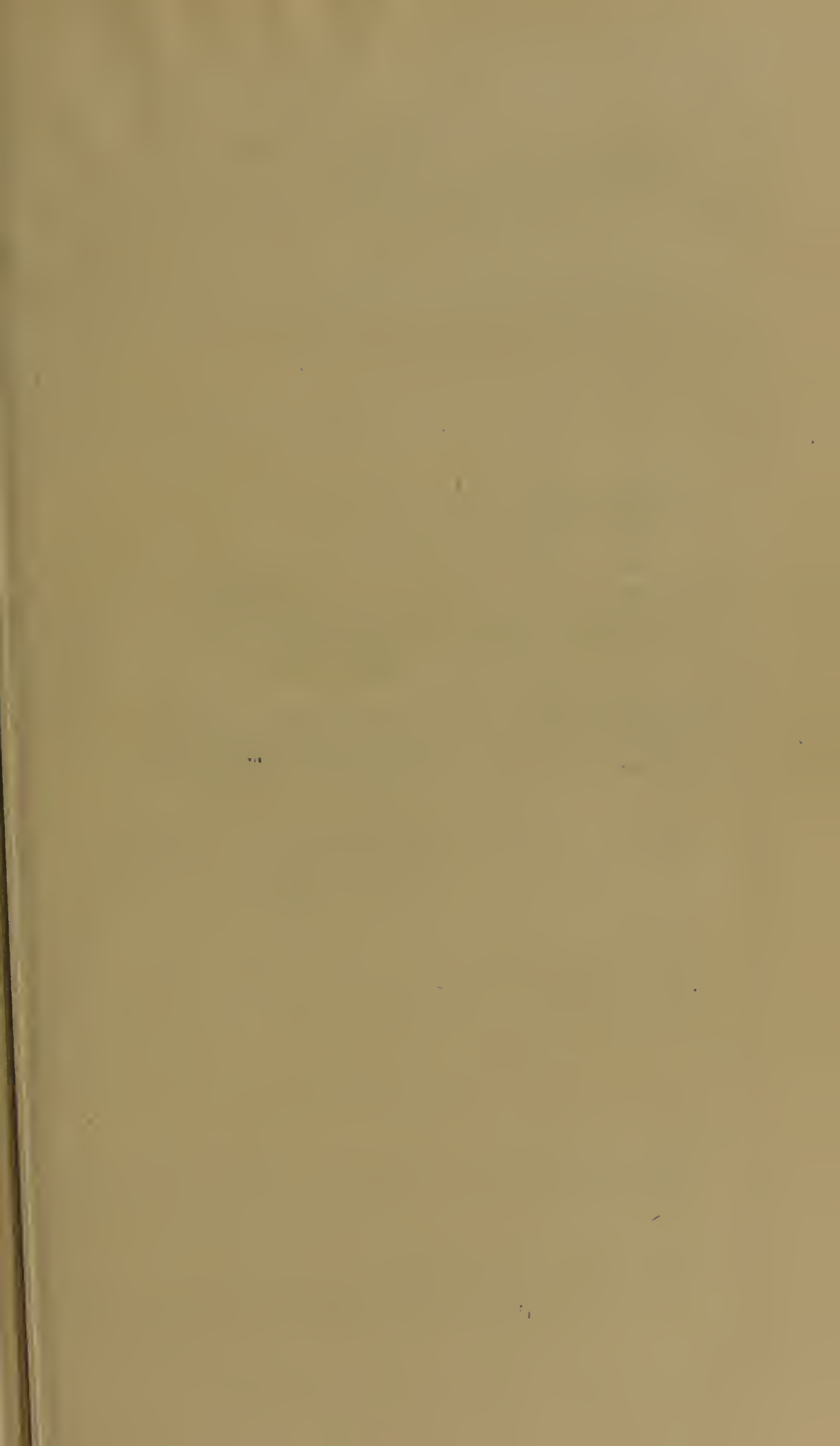
Smallpox Hospitals.—The accommodation for cases of smallpox at the various hospitals was set out in detail in the Survey Report for 1925, pages 15 and 16.

TUBERCULOSIS.

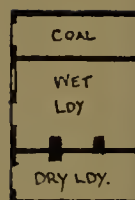
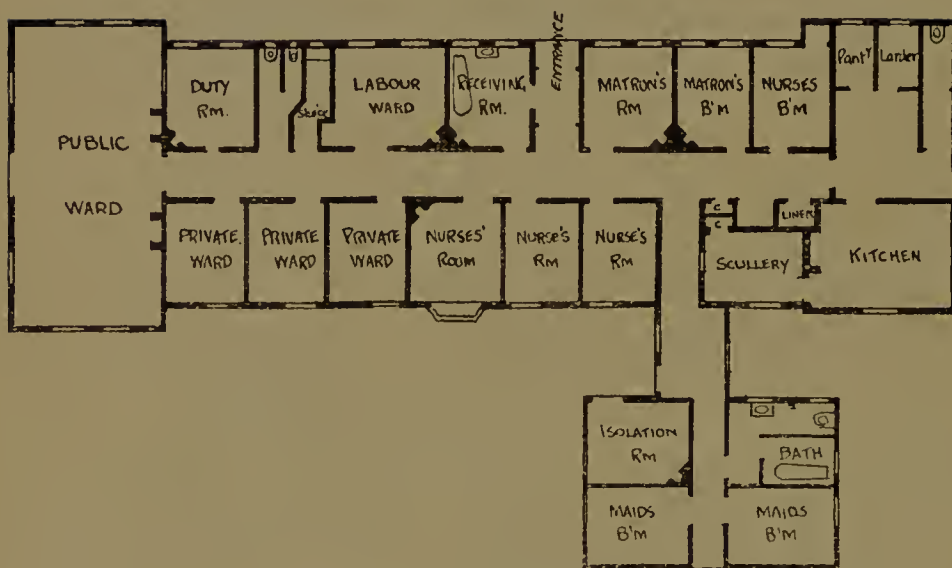
There are in the Administrative County of Derby, three hospitals for the accommodation of cases of tuberculosis occurring with the area :—

1. Walton Sanatorium,
2. Penmore Pavilion,
3. Bretby Hall Orthopædic Hospital.

Further information concerning these institutions is given under the heading of Tuberculosis on page 67.



— ASHBOURNE MATERNITY HOME —
 — Derbyshire County Council. —



MATERNITY HOMES.

The County Council have provided Maternity Homes at Ashbourne and Ripley, and have contracted with the Chesterfield Corporation for the use of 4 beds at the Chesterfield Maternity Home.

Ashbourne.—During the year 1926, 76 cases were admitted to the old and new Homes at Ashbourne. Of these 65 were delivered by midwives and 6 by doctors. The remaining 5 cases were admitted on account of abortion or other complications of pregnancy.

The number of admissions and the expenditure at the Old and the New Homes at Ashbourne, during the year ended March 31st, 1927, are tabulated below :—

					<i>Old Home.</i>	<i>New Home.</i>
No. of cases admitted	...	...	...	...	53	33
Gross Cost	...	...	...	...	£450	£527
Fees received from Patients	...	...	...	...	£212	£189
Net Cost to County	...	...	...	...	£238	£338

The new Maternity Home, erected by the County Council at Ashbourne was opened by Her Grace the Duchess of Devonshire on November 30th, 1926. There is accommodation for 6 cases in the public ward, and 3 cases in separate one-bedded private wards.

For some years a house on the Buxton Road had been used as a Maternity Home, but was found inadequate for the requirements of the area as well as being structurally unsuitable. The new building consists of three blocks: a main block, containing a receiving room, a public ward, 3 private wards, a labour ward, duty room, kitchen, scullery, larder, pantry, Matron's sitting room, Matron's bedroom and three nurses' bedrooms. The second block is directly connected to this and contains accommodation for maids, and an isolation ward; a wet and dry laundry, coal house, store etc., is provided in a detached block. The main ward is 36 ft. × 18 ft. and contains 6 beds. The three private wards, all facing south are 12 ft. × 9½ ft. Along the southern and western aspects of the block is a terrace 15 ft wide in the former and 10 ft. wide in the latter. The isolation room is 10 ft. × 12 ft. and is entered from the terrace. Mr. G. H. Widdows, F.R.I.B.A., Architect to the Education Committee, was the architect.

The total cost of the completed building was £5,930.

A Plan of the New Maternity Home is given opposite.

Ripley.—During 1926, 113 patients were admitted to this Home. Of these 65 were delivered by midwives and 37 by doctors. The remaining 11 patients were admitted on account of abortion or other complications of pregnancy.

During the financial year ended March 31st, 1927, the number of admissions was 119, the gross cost being £1,033. The sum of £478 was received as fees from patients leaving a net cost to the County of £555.

The costs of these two institutions compare extremely favourably with those of similar institutions throughout the country.

Chesterfield.—During the year 1926, 122 cases were admitted from the County area, of whom 37 were normal cases paying the full fee.

Nightingale Home, Derby.—An agreement has been drawn up between the County Council and this Home, under which the Authorities of the Nightingale Home have undertaken to reserve two beds for the reception of women resident in the County area during the lying-in period, whose confinements are, or are likely to be complicated, or whose home conditions are unsuitable. These facilities will become operative early in 1927.

OTHER HOSPITALS.

See Survey Report, 1925, pages 16—17.

AMBULANCE FACILITIES.

(a) FOR INFECTIOUS CASES.

See Survey Report, 1925, page 17.

(b) FOR NON-INFECTIOUS AND ACCIDENT CASES. The Telephone numbers of the various Derbyshire Red Cross Society's Ambulance Stations throughout the County are set out below :—

Red Cross Garage, Bakewell	...	...	Bakewell 4
Sander's Garage, Buxton	...	...	Buxton 76
Mr. Gilbert's Garage, Creswell	...	...	Creswell 14
The Fire Station, Derby	...	...	Derby 1
21, Crompton Street, Derby	...	...	Derby 1361
Galtee House, Ilkeston	...	...	Ilkeston 161
Mr. Crosland's Garage, New Mills	...	...	New Mills 63
Oak Cottage, Sudbury	...	...	Sudbury 1
Mr. Gabbitas, High Street, Stonebroom	...	...	Tibshelf 19x

There are also privately owned ambulances in connection with Collieries and other large works, and in many cases these are loaned when necessity arises.

CLINICS AND TREATMENT CENTRES.

Maternity and Child Welfare Centres.—The County Council provides, under its Maternity and Child Welfare Scheme, 49 Infant Welfare Centres, 19 of which are situated in Urban Districts and 30 in Rural Districts. The majority of the Centres hold weekly sessions and are under medical supervision. A Health Visitor is in attendance at each session.

Details of the Infant Welfare Centres are set out in Table VI.

TABLE VI.
INFANT WELFARE CENTRES.

Address.	Whether Sessions are held weekly fortnightly etc.	Day and time of Meeting.	No. of Sessions.	Average Attendance per Session.		Present arrangements for medical supervision.
				Expectant Mothers.	Children.	
URBAN DISTRICTS.						
ALFRETON.						
P.M. Church, Somercotes	Fortnightly	2nd and 4th Monday, 3—5	21	0.05	39.43	Dr. Pooler, Monthly
Methodist Free Church, Alferton	Do.	1st & 3rd Monday, 2—6	21	0.14	51.47	Dr. Pooler, Monthly
The Schoolroom, Ironville	Monthly	4th Monday 2—4	5	0.80	23.20	Dr. Pooler, Monthly
Congregational Assembly Room, Riddings	Fortnightly	1st & 3rd Monday, 2—4	19	0.37	25.84	Dr. Pooler, Monthly
ASHBOURNE.						
St. John's Rooms, Ashbourne	Weekly	Wednesdays, 12—4	45	1.9	26.82	Dr. Bryan Monthly
BELPER.						
Green Hall, Belper	Weekly	Thursdays, 2—4	46	0.72	42.26	Dr. Purce, Monthly
BOLSOVER.						
Church Hall, Bolsover	Fortnightly	1st & 3rd Tues., 2—4	24	0.21	15.21	Dr. Pooler, Fortnightly
NEW BOLSOVER.						
Bainbridge Hall, Bolsover	Fortnightly	2nd & 4th Thurs., 2.30—5	12	Nil	13.42	Dr. Pooler, Fortnightly
CLAY CROSS.						
The Vicarage, Clay Cross	Weekly	Wednesday, 1.30—4	49	1.85	67.34	Dr. Pooler, Weekly
DRONFIELD.						
Cong. Chapel, Dronfield	Weekly	Monday, 1—4	46	0.08	19.84	Dr. Burke, Monthly
HEANOR.						
Recreation Pav., Heanor	Weekly	Monday, 1—4	44	0.82	50.68	Dr. Macdonald monthly
Wesleyan Schoolroom, Langley Mill	Fortnightly	1st & 3rd Weds., 2—4	22	0.16	22.96	Dr. Macdonald monthly
LONG EATON.						
4, Notts. Road, Long Eaton	Twice Weekly	Mon. & Thurs., 2.30—4	96	1.72	62.54	Dr. Moir, weekly
Wes. Schoolroom, Victoria Street, Sawley	Weekly	Tuesdays, 2—4	48	0.77	20.71	Do.
NEW MILLS.						
St. James' Schoolroom, New Mills	Weekly	Thursdays, 2—4	45	Nil	19.22	Dr. Pemberton, Fortnightly
RIPLEY.						
Old Schools, Outram Street	Weekly	Monday, 2—4	47	0.70	58.51	Dr. Hendry, Monthly
MAREHAY.						
Bethel Chapel	Weekly	Thursdays, 10—12	46	0.93	46.11	Do.
SWADLINCOTE.						
Alexandra Road, Swadlincote	Weekly	Monday, 2—6	47	2.76	54.10	Dr. Cochrane, Monthly
WIRKSWORTH.						
Baptist Hall, Wirksworth	Fortnightly	2nd & 4th Thursday, 2—4.30	22	0.23	11.18	Dr. Haine, Monthly

Address.	Whether Sessions are held weekly fortnightly etc.	Day and time of Meeting.	No. of Sessions.	Average Attendance per Session.		Present arrangements for medical supervision.
				Expectant Mothers	Children.	
RURAL DISTRICTS.						
ASHBOURNE. Middleton-by-Wirsworth Prim. Vestry,	Fortnightly	2nd & 4th Wednesdays 2—4	23	0·21	14·12	Nil.
BAKEWELL. The Institute, Tideswell	Fortnightly	1st & 3rd Thursdays 1—5	26	0·96	16·46	Dr. Parke, Monthly
BELPER. Council Room, Crich	Do.	2nd & 4th Thursdays, 2—4	22	0·36	15·50	Dr. Maedonald, Monthly
BLACKWELL. Cliff House, Shirebrook	Weekly	Wednesdays, 2—4	50	2·30	38·98	Dr. Wear, Weekly
Pleasley. Wesleyan Mission Room	Fortnightly	2nd & 4th Thursdays, 2—4·30	19	0·10	37·78	Dr. Wear, Fortnightly
Langwith. Miners' Institute.	Do.	1st & 3rd Mon., 3—5	24	2·08	91·17	Do.
Tibshelf. Ch. Mission Room.	Do.	1st & 3rd Ths., 2·30—4·30	24	0·04	18·29	Do.
Blackwell. Newton Wesley Schoolroom,	Do.	1st & 3rd Mon., 1—3	21	0·09	26·00	Do.
Hillstown. Wes. Mission Hall,	Do.	2nd & 4th Mon., 2—4	21	0·52	38·90	Do.
Pinxton. Prim. Meth. School,	Do.	2nd and 4th Wednesdays 1·30—3·30	22	1·36	29·22	Do.
So. Normanton. Miners' Welfare	Do.	2nd & 4th Tues. 1·30—4	26	1·31	33·19	Do.
CHESTERFIELD.						
Eekington. Wesleyan Schoolroom	Weekly	Mon., 1 to 4	48	0·25	42·23	Dr. Gunning, Monthly
Barrowhill. Church Hall	Weekly	Mon., 2—4	45	1·44	41·97	Do.
Unstone. Wesleyan Church	Weekly	Mon., 2	48	1·27	34·10	Dr. Burke, Monthly
Staveley. P.M. Chapel	Weekly	Tuesday, 1·30—4·30	44	0·15	18·04	Dr. Peck, Monthly
Heath. Holmwood Mission Room	Weekly	Monday 2·30—4·30	47	0·06	14·64	Dr. Peck, Monthly
Stonebroom. Church Institute	Weekly	Monday, 10—12·30	45	1·13	26·55	Dr. Pooler Weekly,
Shirland. Workmen's Institute	Weekly	Thursday, 10—12·30	46	0·06	10·89	Dr. Pooler, Fortnightly
Grassmoor. P.M. School	Weekly	Monday, 2—4	47	0·13	19·34	Dr. Burke, Monthly

Address.	Whether Sessions are held weekly fortnightly, etc.	Day and time of Meeting.	No of Sessions	Average Attendance per Session.		Present arrangements for medical supervision.
				Expectant Mothers	Children.	
North Wingfield. The Rectory School	Weekly	Thursday, 2.30—4.30	47	Nil	30.95	Dr. Pooler, Fortnightly
Brimington. Church Hall	Weekly	Mondays, 2—4	45	0.24	25.71	Dr. Burke Monthly
Beighton. C. of E. Schoolroom	Weekly	Tuesday, 2—4	48	0.75	50.62	Dr. Gunning, Monthly
Killainarsh. Free Church Room	Weekly	Wednesday, 2—4	48	0.44	44.10	Dr. Gunning, Monthly
CLOWNE P.M. Chapel, Clowne	Weekly	Tuesday, 1.30—5.30	48	0.14	17.58	Dr. Pooler, Fortnightly,
HARTSHORNE & SEALS. P.M. School, Overseal	Weekly	Monday, 10.30—4	45	0.07	16.86	Dr. J. H. Moir, Monthly
HAYFIELD. Wesleyan Methodist Church. Hayfield.	Fortnightly	Tuesdays, 2—4	22	Nil.	17.81	Dr. Lynch.
SHARDLOW RURAL. Lenton Street School. Sandiacre	Fortnightly	2nd & 4th, Mondays, 2—4.15	23	1.09	38.43	Dr. Hunt, Monthly
Church School, Draycott	Do.	2nd & 4th Wednesdays, 1.30—4	18	0.94	18.00	Dr. Hunt, Monthly
Spondon. Wesleyan Chapel	Do.	1st & 3rd Tuesdays, 11—4.30	21	0.14	13.28	Dr. Hunt, Monthly
Cooks Institute, Melbourne	Weekly	Wednesdays, 10.15—5	49	1.32	41.14	Dr. Hunt, Monthly

SCHOOL CLINICS.

School Clinics are established at the following places:—

(1) MINOR AILMENT CLINICS.

Alfreton.	Ripley.
Belper.	Shirebrook.
Long Eaton.	Swadlincote.

To these Clinics any ailing child may be sent by teacher or parent without an appointment.

(2) X-RAY CLINICS for the treatment of ringworm are established at

School Clinic, Brimington Road, Chesterfield.
New County Offices, St. Mary's Gate, Derby.

(3) ORTHOPAEDIC CLINICS for the examination, supervision and treatment of crippled children are established at

Alfreton.	Derby.
Belper.	Long Eaton.
Chesterfield.	Swadlincote.

Children must not be sent to these Clinics without an appointment.

(4) EAR, NOSE AND THROAT CLINICS for the examination and treatment of diseases of the ear, nose and throat are established at—

Alfreton (examination).
 Ashbourne (operation and examination).
 Belper (examination).
 Clay Cross (examination).
 Clown (examination).
 Chesterfield (operation and examination).
 Chinley (operation and examination).
 Derby (operation and examination).
 Long Eaton (examination).
 Matlock (examination).
 Ripley (examination).
 Swadlincote (examination).
 Shirebrook (operation and examination).

A charge of 10s. is made for each operation for tonsils and adenoids, but may be wholly or partly remitted in necessitous cases.

Children must not be sent to the treatment clinics without an appointment.

(5) EYE CLINICS.—The Education Committee have a whole-time Ophthalmic Surgeon, who visits the various clinics in the County to examine and prescribe for children found by the school Medical Inspectors to be suffering from eye defects. Clinics have been established at :—

Alfreton.	Chesterfield.	Eckington.
Ashbourne.	Chinley.	Long Eaton.
Bakewell.	Clay Cross.	Matlock.
Belper.	Clown.	Ripley.
Beighton.	Derby.	Shirebrook.
Bolsover.	Dronfield.	Swadlincote.
Buxton.		

(6) DENTAL CLINICS have been established at :—

Ashbourne.	Long Eaton.
Belper.	Matlock.
Chesterfield.	Swadlincote.
Derby.	Shirebrook.

Further details of the Clinics are given in the Annual Report of the School Medical Officer for the year 1925.

TUBERCULOSIS DISPENSARIES.

The following is a list of the 9 Tuberculosis Dispensaries in the County, giving the name of the Tuberculosis Officer and the days and times of opening of each Dispensary :

ASHBOURNE DISPENSARY.—Stone House, Dark Lane, Ashbourne.

Open :—2nd and 4th Thursdays of the month, 11 a.m. to 1 p.m.

DR. P. HEFFERNAN.

BURTON DISPENSARY.—31, Union Street, Burton-on-Trent.

Open :—1st and 3rd Thursdays of the month, 10.30 a.m. to 12.30 and 2 to 4.30 p.m.

DR. P. HEFFERNAN.

CHESTERFIELD DISPENSARY.—Brimington Rd., Chesterfield

Open :—Tuesdays, Thursdays and Fridays, 10 a.m. to 12.30 p.m. and 2 to 5 p.m.

X-Ray examinations of Pulmonary Cases on 1st and 3rd Mondays of month only, 11 a.m. to 1 p.m.

DR. B. S. NICHOLSON.

CHINLEY DISPENSARY.—Lower Lane, Chinley.

Open :—Mondays, 11 a.m. to 1 p.m. and 2 to 5 p.m.

DR. P. HEFFERNAN.

DERBY DISPENSARY.—County Offices, St. Mary's Gate, Derby.

Open :—Tuesdays (Children only), 2.30 to 4.30 p.m.
Fridays, 10.30 to 12.30 and 2 to 4 p.m.

DR. I. C. MACKAY.

GLOSSOP DISPENSARY.—Surrey Street, Glossop.

Open :—Wednesdays, 11 to 1 and 2 to 4 p.m.

DR. P. HEFFERNAN.

ILKESTON DISPENSARY.—Albert Street, Ilkeston.

Open :—Wednesdays, 11 to 1 and 2 to 4.30 p.m.

DR. B. S. NICHOLSON.

LONG EATON DISPENSARY.—4, Nottingham Road, Long Eaton.

Open :—Tuesdays, 10 a.m. to 12 noon.

DR. I. C. MACKAY.

MATLOCK DISPENSARY.—Snitterton Road, Matlock.

Open :—Tuesdays, 10 to 1 and 2 to 4 p.m.

DR. P. HEFFERNAN.

Venereal Diseases Clinics have been established at

	<i>Males.</i>	<i>Females.</i>
Chesterfield & North Derbyshire Royal Hospital	Tuesdays, 4.30 to 6.30 Fridays, 2.30 to 4.30	Tuesdays, 2 to 4. Fridays, 11 to 12.30
Derbyshire Royal Infirmary, London Road, Derby	Mondays, 6 to 8. Wednesdays, 6 to 8. Saturdays, 2 to 4.	Mondays, 3 to 5. Thursdays, 6 to 8.

PROFESSIONAL NURSING IN THE HOME.

General.—The County Council have arrangements with the Derby County Nursing Association for the nursing of bedridden cases of tuberculosis in their own homes. During the year this service was provided for 20 such cases.

General nursing, apart from tuberculosis, is carried out in various parts of the County by the District Nursing Associations, the majority of which are affiliated to the County Nursing Association.

No arrangement has been made by the County Council for the home nursing of infectious diseases.

Puerperal Fever and Ophthalmia Neonatorum.—Regulations governing the notification of Puerperal Fever, Puerperal Pyrexia and Ophthalmia Neonatorum were issued during 1926 by the Minister of Health, together with explanatory Circulars. They request County Councils as Local Supervising Authorities of Midwives and Maternity and Child Welfare Authorities to provide home nursing or institutional treatment for cases of these diseases. It was considered by the Committees concerned in this County that institutional treatment for such cases would be not only a preferable, but a more workable arrangement in view of the facts that the care of such cases should be constant both day and night and that frequently it would be the case that the home conditions would not lend themselves either to the accommodation of a nurse or to the facilities necessary for adequate nursing. At the time of writing the Report arrangements are well advanced for the provision of institutional accommodation for such cases.

Ophthalmia Neonatorum.—The incidence of this disease and the results of treatment, are set out in the Table below. The procedure adopted for the investigation of such cases was explained in the Survey Report for 1925 (page 116).

TABLE VII.

<i>Noti- fied.</i>	<i>Cases.</i>		<i>Vision unim- paired.</i>	<i>Vision im- paired.</i>	<i>Total Blind- ness.</i>	<i>Deaths.</i>
	<i>Treated</i>					
	<i>At Home</i>	<i>In Hospital</i>				
53	45	8	50	1	—	2

Midwives.—The employment and subsidising of practising midwives by the County Council, together with the number of midwives practising in the County area are referred to under the section of this report dealing with Maternity and Child Welfare.

LEGISLATION IN FORCE.

The Survey Report 1925 (page 27) gives the information received from the various District Councils, and the following additions were made during 1926 :—

Belper Urban.—Bye-laws with respect to new streets and buildings.

Ilkeston Borough.—Public Health Acts, 1925, Parts II and V inclusive. Bye-laws relating to new streets and buildings.

Long Eaton Urban.—Parts 2, 3, 4 and 5 of the Public Health Act, 1925.

Ripley Urban.—Bye-laws relating to new streets and buildings.

Wirksworth Urban.—Compulsory Order for notification of Chicken-pox.

Blackwell Rural.—Public Health Act, 1925, parts 2, 3 and 4 other than Sections 17, 18, 19, 21, 22, 24, 35, 39 and 44. These provisions became operative on April 1st, 1925

Repton Rural.—Two new series of Building Bye-laws—one for populous areas and one for rural areas.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply.—The various water supplies in the County were fully described in the Survey Report 1925, pages 28—31. During the year the following extensions and alterations were made :—

ALVASTON & BOULTON URBAN.—A constant supply of Derwent Valley water is now laid on to all but six houses and five farms.

ASHBOURNE URBAN.—Work on the scheme for an additional supply of water from Rodsley has been proceeding during the year. It is hoped that when the scheme is completed the requirements of the District will be met for many years to come.

BAKEWELL URBAN.—During the year an Inquiry was held by the Ministry of Health for their sanction to a loan of £11,500 for the installation of an additional engine and pump.

BOLSOVER URBAN.—In the latter part of the year the supply has to be turned off frequently on account of the diminution in the flow from the tunnel. A well was sunk at Whaley to a depth of 36 feet, and the daily average quantity of water pumped was over 1,000,000 gallons. It is hoped to proceed with a scheme for new works during 1927. The Ministry of Health held an Inquiry in respect of waterworks of a preliminary nature for Whaley, comprising a well with two boreholes, a storage tank of 10,000 gallons capacity and a supply main for the village of Whaley. If this preliminary scheme proves satisfactory, a complete scheme will be brought forward capable of delivering 350,000 gallons daily to the Bolsover mains, and this will enable water to be supplied to other villages such as Whaley Common and Whaley Thorns. During the year 9 houses have been provided with a public water supply in lieu of wells.

CLAY CROSS URBAN.—During the year the Council received the sanction of the Ministry of Health to borrow £2,250 for the construction of the borehole portion of the scheme. The full scheme is estimated to cost £17,750.

HEAGE URBAN.—The main for the water from the Belper Urban District Reservoir at Bessyloan is in course of being laid, and it is hoped that this will provide an ample supply to that part of the District which has been in such great need of water.

LONG EATON URBAN.—The installation of two sets of crude oil-engines at the water works in place of the old steam engines has been completed. A considerable amount of work has been done during the year in connection with the clearing out of the headings at the waterworks and this work is now nearing completion.

NORTH DARLEY URBAN.—The District Council have purchased the Rowsley and Tinkersley waters for the northern part of the district.

RIPLEY URBAN.—A new water main has been laid in Manvers Street to extend the district. A scheme is under consideration for laying a 3 inch main from the Iron Bridge to the Cricket Ground, Nottingham Road, to improve the supply. This will take its supply from Peasehill water tank and will afford the town an additional supply of water from the Ilkeston and Heanor Water Board whenever required.

ASHBOURNE RURAL.—Ten houses at Brailsford have been supplied with water by arrangements made with a private water company.

BAKEWELL RURAL.—A scheme for the supply of Eyam is now in hand and the supply for Eyam Woodlands is to be augmented.

BELPER RURAL.—During the year Mapperley ceased to take its supply from the Shipley Colliery. New mains have been laid and a supply taken from the Shardlow Rural District Council's service.

BLACKWELL RURAL.—There is no important alteration to report in the water supplies of this area, although early in the year a means of obtaining a more adequate supply was suggested to the District Council. The suggestion entailed co-operation with surrounding areas, and would have met an urgent need.

CHAPEL-EN-LE-FRITH RURAL.—Towards the end of 1926 an Inquiry was held by the Ministry of Health into a scheme for the supply of Harpur Hill. Bamford has independently augmented its supply by a connection with the Derwent Valley Water Board's supply. A considerable amount of work has been done to augment the supplies to the reservoir at Dove Holes by relaying and cleaning the collecting pipes.

CHESTERFIELD RURAL.—A number of lengths of cast-iron mains were laid during the year. The Ministry of Health held an Inquiry on this District Council's application to borrow £13,500 for the purposes of water supply. The proposals are the installation of filters at Crow Hole together with the necessary works.

CLOWN RURAL.—During the year the Ministry of Health held an Inquiry on the application of this District Council to borrow £4,750 for the construction of a new 6 inch main from the reservoir near Barlborough cross roads, along Renishaw Lane, and a new 4 inch main along Syday Lane to Spinkhill Station. This would supply water to Spinkhill.

GLOSSOP DALE RURAL.—The Rural Authority has now acquired a supply of water for the Ludworth area, having bought Lord Howard's supply. There is also a supplementary supply available from Stockport, via Marple, in case of shortage.

HARTSHORNE & SEALS RURAL.—Woodville is now supplied by the Woodville and Overseal water scheme from a well 91 feet deep at Smisby, from which it is pumped to a tank on the Woodville Road. The supply so far has been fluctuating in quantity. Overseal is not yet supplied by this scheme owing to the failure of the mains laid to pass the necessary tests.

REPTON RURAL.—Houses have been connected at Linton, Repton and Castle Gresley to the South Staffordshire water mains, and at Mickleover to the Derby water main—154 houses in all have thus been dealt with.

SHARDLOW RURAL.—A joint water scheme for Ockbrook, Breaston, Draycott, Elvaston, Shardlow, Aston and Chellaston was commenced during the year and good progress has been made with

the reservoir. Schemes are in hand for Sawley (Long Eaton Main) and Kirk Hallam (Ilkeston main). The Derby main is being extended through Chaddesden, and an extension made to Gladstone Street, Spondon. A further extension has been made along the Mansfield Road, Breadsall. During the year the Ministry of Health held an Inquiry on the application of the District Council to a loan of £11,200 for water supply to Melbourne. The scheme includes the provision of two reservoirs with the necessary pumping machinery, etc.

RIVER POLLUTION AND SEWAGE PURIFICATION.

Details of the conditions existing in the various Sanitary Districts in the County were set out in full in the Survey Report of 1925, pages 32—39. The following extensions and improvements were undertaken during 1926 :—

ALFRETON URBAN.—A new percolating filter, 75 feet in diameter was completed at Meadow Lane at a cost of £675. A similar filter was commenced at Birehwood, and a new outfall drain was laid at Swanwick Sewage Farm to convey the effluents from four filters direct to Butterley (Canal) Reservoir at a cost of £340.

The sewerage system was extended by the construction of 580 yards of 9 inch stoneware pipe sewer by the Somercotes Land Society.

ALVASTON & BOULTON URBAN.—760 houses in this district are now connected with the Derby Corporation Sewage works. A temporary filter to deal with the effluent from 55 houses has been made permanent.

BELPER URBAN.—During the year the sewerage of Hopping Hill area has been carried out and plans have been prepared for the sewerage of Lane End area.

BOLSOVER URBAN.—During the year new sewage works at Langwith to deal with the sewage from East Ward (Whaley Thorns) were in course of construction, and by the end of year most of the properties in this area were connected up. Sewers have been constructed on the Housing sites at Moor Lane and Shuttlewood and a sewer in new Station Road was in course of construction during the year.

BRAMPTON & WALTON URBAN.—The sewer from the Riversdale area has been completed and connections with this sewer have been made to the houses in the neighbourhood.

BUXTON BOROUGH.—The sewer has been extended along the Brown Edge Road.

CHESTERFIELD BOROUGH.—The new sewage disposal plant on the activated sludge system was opened in August, 1926.

DRONFIELD URBAN.—During the year extensions were carried out to convey the drainage from houses in Lea Road.

GLOSSOP BOROUGH.—During the year 460 yards of sewer were laid in Simmondley New Road, and 250 in Woodhead Road, whilst 448 yards of old sewer were replaced by sanitary pipes.

HEANOR URBAN.—The Cross Hill Sewage Works have been extended so as to deal with the sewage of Waingroves (Ripley U.D.)

LONG EATON URBAN.—The sewers have been extended in College Street, Oakland Avenue and Willow Avenue.

NEW MILLS URBAN.—Plans for extension of the sewage works were passed by the Ministry and sanction obtained to spend £7,000.

RIPLEY URBAN.—By the end of the year the work on the Codnor and Waingroves joint sewage scheme was completed. The cost of this work was approximately £4,100. A new filter has been put down at the Southern Sewage Farm at a cost of £900.

ASHBOURNE RURAL. During the year a septic tank at Hognaston and one at Mapleton have been provided ; the extension of a sewer at Ednaston and the relaying of part of the main sewer at Brasington have also been carried out.

BELPER RURAL.—During the year additional lengths of sewer were laid in Allestree and a complete sewerage scheme prepared. A scheme for Criei has been the subject of an inquiry by the Ministry of Health and has now received their approval. A scheme for Horsley Woodhouse and a joint scheme for Denby and Kilbuck have been drafted.

BLACKWELL RURAL.—Additional precipitation and detritus tanks have been constructed at Pleasley Low Works. A scheme for dealing with the sewage of Scarscliffe and Hillstown has been prepared and submitted to the Ministry of Health. The sewage works at Langwith for the combined districts of Blackwell, Bolsover and Worksop rural are completed and receiving the sewage from the whole of these populous areas. The works at Carnfield have been reconstructed and percolating filter and mud drying beds laid down. Additional land has been taken over and mud drying beds constructed at Palterton.

CHESTERFIELD RURAL.—The main outfall works at Stonebroom have been re-modelled and the properties on the Common and Northfield areas connected with them ; 2,197 yards of stoneware and cast iron pipes having been laid.

HARTSHORNE & SEALS RURAL.—A scheme for the sewerage and sewage disposal of Overseal, estimated to cost £10,850, is being considered by the District Council.

HAYFIELD RURAL.—The bed of the stream in the parish of Hayfield has been cleaned out and notices issued warning the public against depositing refuse therein.

REPTON RURAL.—A new sewerage scheme has been carried out for Milton.

SHARDLOW RURAL.—During the year the Ministry of Health held an Inquiry on the application of this District Council for sanction to a loan of £9,070 to provide sewerage and sewage disposal for Chaddesden, but owing to the inflation of prices caused by the coal dispute, the scheme was not commenced during the year. Sewer extensions were carried out at Stanley, Stanton-by-Dale, Melbourne and Normanton.

RIVER POLLUTION.

During the year special attention has been given to the question of river pollution in this County, and a confidential report was drawn up by me, presented to the Chairman of the Public Health and Housing Committee early in 1927, and later considered by the Committee.

The question of the prevention of Rivers pollution and the difficulties connected with it are not confined to the County of Derby. Throughout the Country it has been giving rise to considerable anxiety to those who have to deal with the question.

The whole subject is bristling with difficulties, and by no means the least of them are caused by the almost complete absence of any system of country planning. Lack of town planning at the time of the industrial revolution was no more conspicuous than is the lack of any system of what I term "country planning" to-day. Then the tendency was for the population to congregate in towns, and housing of a most soul-destroying variety sprang up. The harm resulting from such conditions as were allowed to prevail can be but very inadequately calculated, but it is not exaggerating to say that it was, and is, indeed great. Now the tendency is towards a centrifugal movement of population from towns into the country, both in the case of industrialism, together with the accommodation for those employed, and also in the case of housing generally. The motor car and the main road are to a great extent the primary cause of this. The result can be seen almost everywhere in the form of chains of houses stretching along main roads, and factories springing up anywhere where there is a river to take their trade wastes and a main road for the carriage of their necessary raw material or their finished products. With such a system it is difficult and expensive to provide adequate sewage disposal works, and a local stream is often used for this purpose. Incidentally no beauty spot in the country is safe from spoliation, and the village green will be superseded by the main road as the children's playground. Almost without exception it is true to say that wherever man adds to nature he detracts from the beauty of things. Whatever lesson we might have learned from the evils accruing from the time of the industrial revolution appears to have been forgotten, and those evils are being re-enacted to-day, but the result will be worse.

As a river pollution prevention authority, we are primarily concerned with the increasing pollution of rivers which results

from the existing state of things, but as a Public Health Authority we shall do well to remember that apart from the ill effects of polluted rivers, the public health will be affected, physically and mentally by the general elimination of all that is beautiful in this country: and who shall say that the mental effect shall not be a greater national catastrophe than the physical?

Before there can be a solution to this problem of rivers pollution, it must first of all be decided whether industrial development of the country is to take precedence over agricultural interests, fishing interests and æsthetic interests. If public opinion still requires that the country should remain beautiful, then it must stimulate its legislature to protect rural areas from indiscriminate industrial encroachment, confine industrial pursuits to definite areas and stop chain building of houses.

However, much as we deplore the marring of the landscape and the pollution of the rivers by that industrialism which is taking from us the æsthetic pleasures which were once available to rich and poor alike, we must nevertheless realise that over 40,000,000 of people cannot in this country be sustained in adequate material comfort by any other means than industrialism, and the problem is therefore one which is something more than a purely scientific one. Science must find ways of purifying effluents, but allowing for a marked success of science in this direction, it is inconceivable to me that purification can for many years be brought to such a state that effluents can be poured into rivers without any regard to the relative volume of the stream and total effluent. Supposing, however, this happy state of affairs is obtained, the present system of indiscriminate expansion of industrialism and housing does not lend itself to the application of scientific methods for purifying the effluents created by it. The remedy for this is a system of country planning. It is surprising that to-day it has not been considered essential to regulate the outward spread of housing and industrialism from the town into the country. This can only be done by Act of Parliament. Again, it is going to be opposed by vested interests, and one can only express the hope that the need for legislation will be rapidly appreciated and that the law will not be nullified by the inclusion of provisos as in the case of existing river pollution legislation. The difficulties in formulating such legislation would be such that no Government is likely to undertake it unless pressure is brought to bear by very strong and unprejudiced public opinion. I believe that if the beauty of this country, including the purity of its rivers, is to be preserved, this step is essential.

The various sewage disposal works in the County are inspected from time to time by myself and the County Sanitary Inspector, and during the year 1926, 196 samples of sewage effluents taken for analysis were classified as follows:—

Good	...	...	82
Satisfactory	...	...	76
Unsatisfactory	...	...	22
Bad	...	...	16

Summary of Sanitary Inspectors' Work.

TABLE VIII.

URBAN DISTRICTS.

[illegible]

URBAN DISTRICTS—continued.

Table VIII. continued

District and Inspector's Name.	Closets and Ashpits.							Drainage.			Other Defects.												Totals.						
	Defective Privies, Pail Closets and Ash pits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes Traps, Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roofs, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Venti- lation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.	Offensive Accumu- lations.		Animals improperly kept.	Pigsties.	Smoke Nuisances.	Urinals.	Nuisances not specified above.	
Dronfield W. A. Parry	29	127	...	4	...	4	67	6	...	3	16	11	7	9	1	1	6	1	147	...	1	8	17	...	2	466
	...	127	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	133
	29	51	...	4	...	4	67	6	...	3	16	11	7	9	...	...	5	1	147	...	...	8	17	...	2	...	...	387
Glossop (Boro') H. Dane.	96	...	...	...	15	3	180	10	...	33	20	...	8	...	12	12	14	...	10	1	2	27	5	2	6	...	40	496
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51		...	...	...	...	...	...	...	...	...	...	...	51
	94	467	...	...	15	3	180	10	...	33	20	...	8	...	18	18	22	...	10	...	2	27	5	2	6	...	38	978
Heage A. J. Fortnam.	11	2	9	1	3	...	10	...	7	...	8	4	4	...	1	1	...	2	7	1	...	2	...	...	...	...	...	73
	2	2	2	1	...	...	...	...	2	...	...	2	2	...	1	1	...	...	1	...	...	...	...	...	...	...	...	16
	14	2	9	5	3	12	35	...	9	...	8	2	4	...	...	1	...	2	7	1	...	6	...	...	...	...	...	120
Heanor A. A. Wilson	61	21	19	10	10	6	150	18	...	137	47	51	63	15	3	35	22	1	14	3	10	10	9	2	6	11	304	1038	
	2	...	...	...	1	...	...	...	...	...	...	1	8	2	...	5	4	...	...	...	...	...	...	...	...	...	16	39
	61	18	18	10	10	6	140	18	...	171	46	48	46	12	3	15	21	1	9	3	6	9	6	2	6	11	394	1090	

URBAN DISTRICTS—continued.

[illegible]

District and Inspector's Name.	Closets and Ashpits.										Drainage.				Other Defects.										Totals				
	Defective Privies, Pail Closets and Ashpits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes, Traps, Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roofs, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Venti- lation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.	Offensive Accumu- lations.	Animals improperly kept.	Pigsties.		Smoke Nuisances.	Urinals.	Nuisances not specified above.	
Swadlincote G. Pollard.	Informal Notices served by Sanitary Inspector ...	289	...	...	...	6	192	...	...	13	25	15	67	5	...	4	2	...	7	...	2	...	...	...	...	...	...	219	846
	Legal Notices served by Local Authority ...	289	...	...	...	6	192	...	...	13	25	15	67	5	...	4	2	...	7	...	2	...	...	...	...	...	...	219	846
Wirksworth H. S. Tebbitt.	Informal Notices served by Sanitary Inspector ...	43	8	...	...	6	29	4	14	28	16	10	36	6	13	11	2	3	6	5	3	5	3	3	...	...	...	43	298
	Legal Notices served by Local Authority ...	25	...	...	...	1	...	...	...	14	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	43
	Nuisances abated ...	43	8	...	...	6	20	4	14	28	16	7	12	4	12	11	2	3	6	5	3	5	3	3	...	...	...	18	234

RURAL DISTRICTS.

Ashbourne J. H. Wheeldon	Informal Notices served by Sanitary Inspector ...	3	3	...	4	3	...	...	2	24	...	...	...	1	...	...	...	...	3	...	1	6	...	...	1	...	...	...	51
	Legal Notices served by Local Authority ...	...	...	...	...	...	...	...	...	8	...	...	...	2	...	...	...	...	9	2	...	14	...	...	...	...	...	...	35
Bakewell A. Green.	Informal Notices served by Sanitary Inspector ...	25	12	...	30	4	7	15	...	7	56	43	1	25	...	4	3	6	15	1	1	40	...	...	1	...	...	...	319
	Legal Notices served by Local Authority ...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
	Nuisances abated ...	25	12	...	30	4	7	15	...	7	56	43	1	22	...	4	3	5	13	1	...	40	...	...	1	...	...	20	311

RURAL DISTRICTS—continued.

[illegible]

RURAL DISTRICTS—continued. *Table VIII. continued.*

District and Inspector's Name.	Closets and Ashpits.							Drainage.					Other Defects.										Totals.						
	Defective Privies, Pail Closets and Ashpits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes, Traps Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roofs, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Venti- lation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.	Offensive Accumu- lations.		Animals improperly kept.	Pigsties.	Smoke Nuisances.	Urinals.	Nuisances not specified above.	
Hartshorne & Seals R. O. Winfield.	Informal Notices served by Sanitary Inspector ...	27	12	...	11	2	2	31	...	15	31	4	9	3	3	2	13	...	3	9	...	1	26	2	...	12	...	...	215
	Legal Notices served by Local Authority	16	11	...	6	...	1	27	...	1	...	...	...	...	...	2	13	...	...	...	...	...	26	2	...	2	...	...	64
	Nuisances abated	27	7	...	7	2	2	15	...	15	31	4	9	...	3	2	13	...	3	9	...	1	26	2	...	2	...	...	190
Hayfield E. Swift.	Informal Notices served by Sanitary Inspector ...	3	3	8	...	2	...	1	...	11	12	...	4	...	...	...	...	6	1	2	...	...	1	...	...	2	...	...	56
	Legal Notices served by Local Authority	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	2	...	...	2
	Nuisances abated	3	3	8	...	2	...	1	...	11	12	...	...	4	...	...	...	6	1	2	...	...	1	...	...	2	...	...	56
Norton E. A. Sampson.	Informal Notices served by Sanitary Inspector ...	1	4	...	...	2	...	8	...	6	2	...	3	...	...	1	...	1	1	4	...	...	2	2	...	...	...	...	37
	Legal Notices served by Local Authority	...	...	...	...	...	...	...	...	1	1	...	1	...	...	1	...	1	...	...	1	...	2	2	...	...	...	2	2
	Nuisances abated	1	4	...	...	...	...	8	...	5	2	...	...	3	...	1	...	1	1	4	...	...	2	2	...	...	...	...	37
Repton F. W. Bullock	Informal Notices served by Sanitary Inspector ...	37	61	34	2	15	3	64	43	4	47	26	...	29	11	7	9	2	...	171	2	1	56	...	2	...	2	31	659
	Legal Notices served by Local Authority	2	4	1	...	...	...	...	...	3	...	...	...	2	5	1	...	...	...	47	...	...	...	...	...	...	...	...	65
	Nuisances abated	37	61	34	2	15	3	64	43	4	43	26	...	26	10	6	9	...	...	154	2	1	56	...	2	...	2	31	631

Shardlow F. G. Forman.	Informal Notices served by Sanitary Inspector ...		56	6	1	14	7	2	113	3	5	51	49	38	34	5	3	12	19	5	42	4	6	41	1	1	1	...	45	564
	Legal Notices served by Local Authority		...	7	...	...	...	...	31	...	...	13	...	3	7	2	...	1	1	...	13	2	1	...	...	...	...	...	8	108
	Nuisances abated		...	18	5	14	6	2	135	3	6	58	47	31	37	14	7	18	16	4	65	9	7	60	1	1	1	1	46	691
Sudbury F. G. Price.	Informal Notices served by Sanitary Inspector ...		2	...	2	...	...	...	...	2	...	...	...	...	6	...	2	...	...	...	...	...	2	2	...	...	...	...	2	18
	Legal Notices served by Local Authority		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nuisances abated		...	...	...	...	...	...	...	2	...	...	...	...	3	...	2	...	...	...	...	...	2	2	...	...	...	...	2	15

TABLE X.

CLOSET ACCOMMODATION.

Districts.	Approximate number of Houses with				Number of Conversions.	
	Privy Middens.	Pail Closets	Water Closets	Trough and slop Water Closets	From Privy-middens to water Closets	From Pail-Closets to water Closets
URBAN.						
Alfreton	114	2,677	2,344	57	21	16
Alvaston & Boulton	69	—	—	—	—	—
Ashbourne	—	—	—	—	2	—
Bakewell	230	54	397	—	—	1
Baslow	120	5	198	—	2	1
Belper	796	522	—	—	1	38
Bolsover	762	865	1,023	—	20	—
Bonsall	—	—	—	—	6	—
Brampton & Walton	—	—	—	—	18	—
Buxton (Boro') ...	13	75	3,301	—	1	—
Chesterfield (Boro')	598	73	13,064	292	508	
Clay Cross	—	—	811	—	24	—
Dronfield	415	—	672	16	51	—
Glossop (Boro') ...	8	998	—	—	—	167
Heage	—	—	—	—	—	—
Heanor	788	2,429	2,211	—	18	18
Ilkeston (Boro') ...	16	2,232	4,946	319	7	3
Long Eaton	23	75	5,629	74	2	3
Matlocks	535	253	1,710	—	8	—
New Mills	—	—	—	—	74	—
North Darley	344	13	521	112	—	—
Ripley	334	1,316	—	—	22	98
South Darley	Nearly all	privy middens		—	—	—
Swadlincote	—	—	—	—	134	—
Wirksworth	337	40	755	4	11	—
RURAL.						
Ashbourne	—	—	—	—	—	—
Bakewell	2,533	1,087	755	—	—	—
Basford	—	—	—	—	—	—
Belper	—	—	—	—	5	15
Blackwell	996	5,069	1,547	—	5	1
Chapel-en-le-Frith	—	—	—	—	47	—
Chesterfield	10,835	390	6,241	—	363	—
Clowne	—	—	—	—	—	—
Glossop Dale	450	66	243	12	13	—
Hartshorne & Seals	—	—	—	—	—	—
Hayfield	—	—	—	—	3	8
Norton	—	—	—	—	4	—
Repton	No	informa- tion.		—	61	34
Shardlow	1,393	2,976	3,883	—	18	5
Sudbury	—	—	—	—	—	2

URBAN DISTRICTS.

TABLE IX.

	ALFRETON.	ALVASTON & BOULTON.	ASHBOURNE.	BAKEWELL.	BASLOW.	BELPER.	BOLSOVER.	BONSALE.	BRAMPTON & WALTON.	BUXTON (BORO').	CHESTERFIELD (BORO').	CLAY CROSS.	DRONFIELD.	GLOSSOP (BORO').	HEAGE.	HEANOR.	ILKESTON (BORO').	LONG EATON.	MATLOCKS.	NEW MILLS.	NORTH DARLEY.	RIPLEY.	SOUTH DARLEY.	SWADLINCOTE.	WIRKSWORTH.
Population	21,970	1,686	4,625	3,002	854	12,990	12,590	1,186	2,149	16,090	66,650	9,194	4,399	19,490	4,413	21,680	32,960	21,750	9,654	8,901	3,729	13,890	675	21,590	3,953
No. of Houses in District	4,813	760	1,142	666	231	2,940	2,621	313	545	3,389	13,852	1,870	1,103	5,530	866	4,639	6,943	5,241	2,498	2,121	990	3,121	206	4,201	999
Average No. of Persons per House	4.56	2.21	4.05	4.50	3.69	4.41	4.80	3.78	3.94	4.74	4.81	4.91	3.98	3.52	5.13	4.67	4.74	4.15	3.86	4.19	3.76	4.45	3.27	5.13	3.95
NUMBER OF NEW HOUSES ERECTED DURING THE YEAR:—																									
(a) Total	114	309	30	4	4	32	135	—	9	110	405	7	13	17	13	54	39	98	31	34	47	64	—	20	3
(b) With State Assistance under Housing Acts	30	12	22	—	—	—	108	—	—	17	210	—	11	—	—	—	14	22	22	21	—	14	—	—	—
(1) By the Local Authority	74	297	—	4	4	—	24	—	6	—	195	5	—	—	13	36	24	73	9	6	—	—	—	—	2
(2) By other bodies or persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
UNFIT DWELLING HOUSES. Inspectious:—																									
(1) No. Inspected for housing defects (under P.H. or Housing Acts)	193	650	80	—	—	50	126	100	—	489	367	83	25	2994	34	403	121	205	173	—	—	92	—	29	220
(2) No. inspected and recorded under Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	43	—	—	—	—		26	—	—	39	184	83	1	202	—	12	—	135	—	—	—	29	—	—	—
(3) No. found to be so dangerous or injurious to health as to be unfit for human habitation	1	—	15	3	1	1	1	5	—	1	33	—	1	—	23	1	—	—	—	—	—	—	1	—	1
(4) No. (except those referred to in preceding sub-head) found not to be in all respects reasonably fit for human habitation	150	4	—	10	—	—	25	—	—	—	182	36	—	202	—	105	121	68	—	—	—	22	—	—	—
REMEDY OF DEFECTS WITHOUT FORMAL NOTICES.																									
No. of defective dwelling-houses rendered fit in consequence of informal action by Local Authority or their officers	100	70	6	—	5	10	15	6	—	—	120	36	—	511	10	105	121	47	4	—	—	20	1	6	—
ACTION UNDER STATUTORY POWERS.																									
A.—Proceedings under Sec. 3 of Housing Act, 1925,																									
(1) No. where notices served requiring repairs	10	591	—	—	9	—	10	—	—	—	18	—	—	51	—	6	2	16	—	—	—	—	—	—	—
(2) No. rendered fit after formal notices:—																									
(a) By owners	9	591	—	—	9	—	10	—	—	—	24	—	—	101	—	5	121	8	—	—	—	—	—	—	—
(b) By Local Authority in default of owners	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	—	8	—	—	—	—	—	—	—
(3) No. in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
B.—Proceedings under Public Health Acts—																									
(1) No. where notices served requiring defects remedying	60	591	—	—	—	—	10	—	—	327	49	—	—	51	—	9	157	22	—	—	—	24	—	—	86
(2) No. rendered fit after formal notices:—																									
(a) By owners	60	591	—	—	—	—	10	—	—	314	49	—	—	30	—	5	157	19	—	—	—	21	—	—	54
(b) By Local Authority in default of owners	—	—	—	—	—	—	—	—	—	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C.—Proceedings under Sections 11, 14 & 15 of the Housing Act, 1925:—																									
(1) No. of representations made with a view to the making of Closing Orders	1	—	2	—	—	1	1	—	—	—	20	—	1	—	23	2	—	—	—	—	—	—	—	—	—
(2) No. of dwelling-houses in respect of which Closing Orders were made	1	—	2	4	—	1	1	—	—	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) No. of dwelling-houses in respect of which Closing Orders were determined, the houses having been rendered fit	1	—	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(4) No. of dwelling-houses in respect of Demolition Orders were made	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(5) No. of dwelling-houses demolished in pursuance of Demolition Orders	—	—	1	—	—	1	1	—	—	1	—	—	—	—	—	6	1	—	—	—	—	—	—	3	—

RURAL DISTRICTS,

TABLE IX.

	ASHBOURNE.	BAKEWELL.	BASFORD.	BELPER.	BLACKWELL.	CHAPEL-LE-FRITH.	CHESTERFIELD.	CLOWN.	GLOSSOP DALE.	HARTHORNE & SEALS.	HAYFIELD.	NORTON.	REPTON.	SHARDLOW.	SUDBURY.
Population	10,390	18,330	1,720	24,270	46,660	16,300	81,920	18,470	3,748	8,665	4,349	4,762	17,600	36,020	2,496
No. of Houses in District	2,337	4,741	381	5,413	9,346	4,016	17,466	3,918	1,106	1,823	1,285	1,381	3,848	9,256	597
Average No. of Persons per House	4.4	3.86	4.51	4.48	4.99	4.05	4.71	4.71	3.38	4.75	3.38	3.44	4.60	3.89	4.18
NUMBER OF NEW HOUSES ERECTED DURING THE YEAR :—															
(a) Total	4	26	5	136	143	49	907	86	20	22	15	22	47	512	1
(b) With State Assistance under Housing Acts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(1) By the Local Authority	4	—	—	—	102	3	273	42	—	21	—	—	—	22	—
(2) By other bodies or persons	—	—	—	—	41	26	634	44	—	—	8	22	44	453	1
UNFIT DWELLING HOUSES. Inspections :—															
(1) No. Inspected for housing defects (under P.H. or Housing Acts)	—	321	—	1,251	500	229	1,182	—	47	43	7	12	564	247	35
(2) No. inspected and recorded under Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	—	—	—	128	115	21	2	—	16	43	—	—	64	247	—
(3) No. found to be so dangerous or injurious to health as to be unfit for human habitation	—	1	—	3	14	2	9	—	—	—	1	4	7	37	2
(4) No. (except those referred to in preceding sub-head) found not to be in all respects reasonably fit for human habitation	—	—	—	53	279	9	819	—	4	9	6	8	41	76	—
REMEDY OF DEFECTS WITHOUT FORMAL NOTICES.															
No. of defective dwelling-houses rendered fit in consequence of informal action by Local Authority or their officers	—	311	—	49	356	13	631	—	4	9	6	8	48	35	5
ACTION UNDER STATUTORY POWERS.															
A.—Proceedings under Sec. 3 of Housing Act, 1925,															
(1) No. where notices served requiring repairs	—	—	—	37	32	16	—	—	3	—	1	—	—	5	—
(2) No. rendered fit after formal notices :—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) By owners.	—	—	—	31	30	18	—	—	3	8	—	—	—	5	—
(b) By Local Authority in default of owners.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) No. in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	—	—	—	1	4	—	—	—	—	—	1	—	—	—	—
B.—Proceedings under Public Health Acts—															
(1) No. where notices served requiring defects remedying	—	319	—	350	77	208	—	—	11	—	—	10	—	76	—
(2) No. rendered fit after formal notices :—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) By owners	—	311	—	256	77	10	354	—	—	—	—	—	—	91	—
(b) By Local Authority in default of owners	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C.—Proceedings under Sections 11, 14 & 15 of the Housing Act, 1925 :—															
(1) No. of representations made with a view to the making of Closing Orders	—	—	—	3	14	2	9	—	—	—	—	1	—	4	—
(2) No. of dwelling-houses in respect of which Closing Orders were made	2	—	—	3	14	1	7	—	—	—	—	1	—	2	—
(3) No. of dwelling-houses in respect of which Closing Orders were determined, the houses having been rendered fit	—	—	—	1	4	—	—	—	—	—	—	1	—	—	—
(4) No. of dwelling-houses in respect of Demolition Orders were made	—	—	—	—	1	—	7	—	—	—	—	—	—	—	—
(5) No. of dwelling-houses demolished in pursuance of Demolition Orders	—	—	—	3	1	—	4	—	—	—	—	—	—	3	—

SCAVENGING.

Details of the existing conditions in the various Sanitary Districts in the County were set out in the Survey Report of 1925, pages 42—45.

The following are alterations which were made during 1926 :—

BOLSOVER URBAN.—During the year, public scavenging has been undertaken for a further 135 dwellings.

CHESTERFIELD BOROUGH.—A new salvage plant has been erected to take the place of the old destructor.

HEANOR URBAN.—During the year two covered motor vehicles were purchased by the District Council for the removal of refuse, and one motor night tank for the removal of pail closet soil.

MATLOCKS URBAN.—In this district the work is carried out partly by the Council's own employees and partly by contract.

NORTON RURAL.—The system of scavenging by private contract not having been satisfactory during the year, the Council are "taking the matter under their own supervision."

REPTON RURAL.—Public scavenging is in operation at Mickleover, Castle Gresley, Linton, Hatton and Foston and Scropton.

SHARDLOW RURAL.—Public scavenging is now in operation in 16 parishes, that at Chaddesden having commenced on October 1st, 1926.

INSPECTION AND SUPERVISION OF FOOD.

SALE OF FOOD AND DRUGS ACTS, 1875 & 1907.

Mr. John White, F.I.C., the County Analyst, reports on the work done under the above Acts as follows :—

The collection of samples for analysis under the above Acts is made by Inspector William Etchells, who is a whole-time Officer, duly appointed by the County Council as an Inspector under the Acts. In addition, he acts as Official Sampler under the Fertilisers and Feeding Stuffs Act, 1906. His work is supervised by me as County Analyst, and he collects the samples day by day throughout the year. Arrangements are made whereby the County is covered as systematically as possible.

The following is a summary of the work done during the year 1926 :—

<i>Total Samples analysed.</i>	<i>Percentage adulterated.</i>	<i>Milk Samples.</i>	<i>Percentage adulterated.</i>
2010	2·4	746	5·3

The average composition of the samples of Milk was as follows :—

<i>Non-fatty solids.</i>	<i>Fat.</i>	<i>Total solids.</i>
8.73	3.61	12.34

The whole of the samples proved upon analysis to be free from preservatives.

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1923.

During the year the following samples were examined under these Regulations :—

Cream	...	...	10
Preserved Cream	...	...	39

Of these one sample of cream contained 0.36 per cent of boric acid, contrary to the Regulations. This was an informal sample, and a subsequent formal sample from the same source proved to be genuine.

The specimens of preserved cream contained in each case a proportion of Boric Acid lower than the limit of 0.4 per cent fixed by the Regulations, and were all properly labelled.

The fat content of the whole of the samples of cream and preserved cream was in every instance satisfactory..

WATER.

The Urban and Rural District Councils in the County submit for analysis samples of water, under an arrangement made by the Public Health Committee, whereby they are analysed at nominal fees.

The number of samples received during 1926 was 86.

Samples of Water, Sewage Effluents, &c., are periodically submitted to me on behalf of the Public Health Committee, and general chemical work is undertaken for the various Committees of the County Council as required.

(Signed) JOHN WHITE,, F.I.C.,
County Analyst.

MILK SUPPLY.

No licenses for the production of Grade "A" milk were issued during 1926 under the Milk and Dairies Amendment Act, 1922.

MILK AND DAIRIES (CONSOLIDATION) ACT, 1915 AND TUBERCULOSIS ORDER, 1925.

The procedure adopted in this County under this Act and Order, fully set out in the Survey Report for 1925, having worked well and expeditiously, has not required any amendment. The successful working has depended very largely upon co-operation between the

Public Health Committee and the Contagious Diseases (Animals) Act Sub-Committee, and I would here like to pay tribute to the help I have received from the Chief Constable and his staff : particularly have I appreciated the help from the Assistant Chief Constable.

The work done during the year under the Act and Order is set out below :—

<i>Animals Slaughtered.</i>	<i>No. with advanced Tuberculosis.</i>	<i>No. with Tuberculosis but not advanced.</i>	<i>No. not Tuberculous.</i>
749	678	65	6

<i>Milk Samples examined</i>	<i>No. in which Tubercle Bacilli found</i>	<i>No. negative to T.B.</i>
338	52	286

On October 1st, 1926, the Milk and Dairies Order 1926 came into operation : Part IV of the Order dealing with the health and inspection of cattle is administered by the County Council. Although the County Council have no duties under the other parts of the Order I invited the Sanitary Inspectors throughout the County to attend a Conference at the County Offices to discuss standards for cow-sheds under the new Order. There was a full attendance, and some Sanitary Inspectors from outside the County also attended. I proposed standards and offered them for criticism and discussion and finally put each detail to the vote. The decisions arrived at by this method were later stencilled and sent to each Sanitary Inspector throughout the County with a letter pointing out that the object of the meeting was not to draw up regulations, but to make uniform our standards and procedure throughout the County and that although the standards we had arrived at could in no way be considered as official they would serve the useful purpose of indicating what was the general consensus of opinion.

CLEAN MILK.

Every effort is taken to ensure the production of clean milk in this County. Last year I set out in my Annual Report particulars of Clean Milk Competitions arranged by the Education (Agricultural) Sub-Committee for this purpose. Since that time further competitions have been arranged and conditions varied in the case of those who have already won prizes. During the coming year, competitions have been arranged for by Mr. J. R. Bond, M.Sc., the Agricultural Organiser to the Derbyshire Education Committee as follows :—

Class A.—Open to milk producers who retail within the Borough of Chesterfield. 1st prize £4 : 2nd prize £2 10s : 3rd prize £1 5s.

Class B.—Open to milk producers who do not retail within the Borough of Chesterfield. 1st prize £4 : 2nd prize £2 10s. : 3rd prize £1 5s.

In addition to the above money prizes, diplomas or certificates will be awarded to competitors whose samples are uniformly of high quality, and certificates will be awarded to the employees engaged in the milking and handling of the milk.

Donors to the Prize Fund.—Chesterfield Borough Health Committee ; Chesterfield Branch of the Derbyshire Farmers' Union ; Chesterfield and East Derbyshire Agricultural Society.

General Conditions.—1. Winners of the 1st Prize in a previous Clean Milk Competition may not enter a District Contest but are eligible to enter the County Competition.

2. Each competitor will be assigned an identification number or letter, known only to himself and the Organisers of the Contest. Names of the winners only will be disclosed.

3. The awards will be based on laboratory tests (for sediment and bacterial count) of 3 to 6 samples of each competitor's milk. No account will be taken of richness in fat or other nutritive solids.

4. The samples will be taken between Monday, 25th April and Friday, 29th July, inclusive.

5. The results of the tests of each series of samples will be circulated to competitors as soon as possible after the samples have been tested.

6. The Organisers reserve the right to close the list of entries on an earlier date, to prolong or to shorten the competition, or to increase the number of samples taken.

7. It is the duty of the District Organiser to give information and advice to competitors who ask for it, and to test trial samples submitted to him.

Special Conditions for Class A.

8. All samples will be taken by or on behalf of the Organisers of the Contest and will be obtained from the churn or churns of milk from which the Competitor is actually retailing in the street.

9. The samples will be taken without notice to the competitor, on any day or days within the period of the contest.

10. Each Competitor will be required to supply the District Organiser with a statement of the streets in which he retails and an indication of the time when he may ordinarily be found in each.

Special Conditions for Class B.

11. All samples will be taken by or on behalf of the Organisers of the contest and will be obtained from the churn or churns of milk after cooling and as prepared for dispatch to the buyer.

12. The samples will be taken without notice to the competitor on any day or days within the period of the contest.

13. Samples may be mornings' or evenings' milk and each Competitor will be required to notify the Organiser as to his times of milking.

Class C. County Competition.—Entry fee 5s. Entries close 16th May.

Open to milk producers resident in Derbyshire who have won a prize or a certificate in a previous Clean Milk Competition.

1st prize United Dairies Challenge Cup, £3 3s. and Gold Medal.

2nd prize £2 2s. and Silver Medal.

3rd prize £1 1s. and Silver Medal.

Also diplomas to all competitors reaching a satisfactory standard and certificates will be awarded to the employees concerned.

Class D. Derby District Competition.—Entry fee 5s. Entries close 16th May.

Open to milk producers resident in Derbyshire, south of Alfreton, Cromford and Parwich, who have not previously won first prize in a clean milk competition.

1st prize £4 4s.

3rd prize £2 2s.

2nd prize £3 3s.

4th prize £1 1s.

Also diplomas and certificates as above.

Class E. Bakewell District Competition.—Entry fee 5s. Entries close 16th May.

Open to milk producers resident in Derbyshire, north of Alfreton, Cromford and Parwich, who have not previously won first prize in a clean milk competition.

1st prize £4 4s.

3rd prize £2 2s.

2nd prize £3 3s.

4th prize £1 1s.

Also diplomas and certificates as above.

Note.—The above list of prizes are provisional; it is hoped to increase the amounts.

Conditions Relative to Classes C, D, and E.

1. Competitors must have at least 6 cows in milk and producing at least 10 gallons of milk per day.

2. The awards will be based partly on the results of laboratory tests of four or more samples of each competitor's milk, and partly on marks to be awarded for the adoption of methods calculated to produce clean milk.

3. The samples will be taken from time to time without notice to the competitor on any days within the period of the competitions.
4. All samples will be taken by or on behalf of the Organisers of the competitions, and will be obtained from the churn or churns of milk after cooling.
5. Samples may be either morning's or evening's milk, but the same number of morning and evening samples respectively will be taken from each competitor.
6. The results of the tests of each series of samples will be circulated to all competitors concerned as soon as possible after the samples have been tested.
7. Each competitor will be designated by a letter or number disclosed only to himself. Names of winners only will be published.
8. The competitions will begin on May 16th and close about the end of July.

Tests. Sediment—on the farm.
 Bacterial Count.
 Coli in 1, .1, .01, .001 c.c.
 Keeping Quality.

Note. It is the duty of the County Agricultural Education Staff to give information and advice to competitors who ask for it, and to take trial samples when required for advisory purposes. .

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

TABLE XI.

Cases of Notifiable Diseases notified during 1926
as reported by the Local Medical Officers of Health.

Urban Districts	Tuberculosis.		Small Pox.	Scarlet Fever.	Diph- theria.	Enteric Fever.	Puer- peral Fever.	Cere- bro- Spinal Fever.	Ery- sipelas.	Ophth. Neon.	Enceph. Letharg.
	Pulmon- ary.	Other									
Creton	8	9	2	40	16	..	2	..	11	3	..
Waveston & Boulton ..	4	..	1	5	5	..	..	..	1	..	..
Whitbourne	2	1	..	..	..	..	..	..	..	1	..
Blackwell	5	1	..	20	..	..	..	..	2	..	1
Haslow .. ..	..	..	..	..	1	..	..	..	..	..	..
Belper	12	5	70	18	15	..	1	1	2	1	..
Colsover	3	7	19	44	21	..	2	..	7	..	..
Wonsall	2	..	..	..	1	..	..	..	..	..	..
Wrampton & Walton ..	..	..	..	2	..	..	..	..	..	..	..
Wuxton (Boro') ..	24	10	..	11	4	1	2	1	2	1	2
Whesterfield (Boro') ..	71	32	2	343	109	..	6	..	23	5	6
Wray Cross	5	4	..	10	1	..	..	..	3	1	..
Wronfield	2	2	..	4	3	..	..	..	..	..	..
Wossop (Boro') ..	26	21	..	26	68	2	3	1	9	..	2
Wedge	8	1	39	4	..	1	..	..	2	..	..
Weanor	16	15	..	26	12	2	3	..	3	1	..
Wkeston (Boro') ..	35	7	..	38	..	..	5	..	10	3	..
Wong Eaton	19	2	..	136	37	..	2	..	12	1	..
Wotlocks	21	12	..	7	2	1	..	1	..	..	..
Wew Mills	10	7	..	14	10	..	..	..	4	2	3
Worth Darley	5	3	..	1	3	..	..	..	..	..	..
Wpley	20	5	9	31	6	..	1	..	6	1	..
Wouth Darley .. ..	..	..	..	..	..	..	..	..	..	..	..
Wradlincote	28	..	10	176	1	..	..	..	6	..	..
Wirksworth	6	1	1	12	..	..	..	..	1	1	..
<i>Urban Districts</i>	332	145	153	968	315	7	27	4	104	21	14
Rural Districts.	Tuberculosis.		Small Pox.	Scarlet Fever.	Diph- theria.	Enteric Fever.	Puer- peral Fever.	Cere- bro- Spinal Fever.	Ery- sipelas.	Ophth. Neon.	Enceph. Letharg.
	Pulmon- ary.	Other.									
Washbourne	14	12	..	15	..	2	2	..	2	1	..
Wakewell	14	9	..	43	2	..	1	1	1	1	4
Wasford .. ..	..	1	..	3	1	..	..	..	..	1	..
Welper	22	14	8	42	14	2	..	..	7	..	..
Wblackwell	37	35	47	120	62	4	4	..	23	2	3
WChapel-en-le-Frith ..	14	18	..	51	5	..	..	..	3	..	1
Whesterfield	99	37	5	238	120	4	9	..	20	13	2
Wlowne	17	6	..	73	45	1	1	..	18	3	4
Wlossop Dale .. ..	..	1	..	5	..	2	..	..	3	..	1
Wlartshorne & Seals ..	8	7	..	20	1	..	..	..	3	..	..
Wlayfield	2	5	..	3	6	..	..	..	2	..	..
WNorton	7	1	..	13	..	..	..	..	1	..	..
WRepton	15	8	1	125	9	1	1	..	2	1	1
WShardlow	63	14	10	85	27	3	2	..	12	7	..
WSudbury	2	1	..	2	..	..	1	..	..	..	..
<i>Rural Districts</i>	314	169	71	838	292	19	21	1	97	29	16
<i>Urban Districts</i>	332	145	153	968	315	7	27	4	104	21	14
<i>Whole County</i> ..	646	314	224	1806	607	26	48	5	201	50	30

TABLE XII.

Shewing the number of Cases, the number of Deaths, the case rate per 1,000 of population and the case mortality per cent from Smallpox, Scarlatina, Diphtheria and Typhoid Fever (Figures supplied by Registrar-General).

URBAN DISTRICTS.	SMALLPOX.				SCARLATINA.				DIPHTHERIA AND MEMBRANOUS CROUP.				TYPHOID FEVER.		
	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.
Alfreton ...	3	...	13	...	40	...	1.82	...	16	...	.73	...	...	...	...
Alvaston & Boulton	1	...	.59	...	5	...	2.96	...	7	...	4.15	...	...	...	...
Ashbourne	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bakewell ...	...	...	...	...	21	...	6.99	...	...	...	...	...	...	...	...
Baslow ...	...	...	...	...	...	...	...	...	1	...	1.17	...	...	...	...
Belper ...	72	...	5.34	...	19	1	1.46	5.26	14	2	1.07	14.28	...	...	...
Bolsover ...	18	...	1.42	...	37	...	2.93	...	19	1	1.50	5.26	...	...	...
Bonsall ...	...	...	...	...	...	...	...	...	1	...	.84	...	...	...	...
Brampton & Walton	...	...	...	...	1	1	.46	100.00	...	...	...	...	...	...	...
Buxton (Boro')	...	...	...	...	10	2	.62	20.00	3	...	.18	...	...	...	...
Chesterfield (Boro')	2	...	.03	...	343	5	5.14	1.45	109	10	1.63	9.17	...	1	...
Clay Cross ...	...	...	...	...	10	...	1.08	...	1	...	.10	...	...	...	...
Dronfield ...	...	...	...	...	4	...	.90	...	3	...	.68	...	...	...	...
Glossop (Boro')	...	...	...	...	26	...	1.33	...	68	3	3.49	4.41	2	...	.10
Heage ...	40	...	9.00	...	3	...	.67	...	...	...	...	...	1	...	.22
Heanor ...	...	...	...	...	26	...	1.19	...	12	...	.55	...	2	...	.09
Ilkeston (Boro')	...	...	...	...	38	...	1.15	...	...	...	...	...	...	...	...
Long Eaton	...	...	...	...	136	...	6.25	...	37	2	1.70	5.40	...	...	...
Matlocks ...	...	...	...	...	8	...	.82	...	2	...	.20	...	1	...	.10
New Mills ...	...	...	...	...	13	...	1.46	...	8	...	.89	...	...	...	...
North Darley	...	...	...	...	1	...	.27	...	3	...	.80	...	...	...	...
Ripley ...	9	...	.61	...	30	...	2.16	...	6	...	.43	...	...	...	...
South Darley	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Swadlincote	10	...	.46	...	176	1	8.15	.56	1	...	.04	...	...	...	...
Wirksworth	1	...	.25	...	12	...	3.03	...	1	...	.25	...	...	...	...
	156	...	.48	...	959	10	2.99	1.04	312	18	.97	5.76	6	1	.01
RURAL DISTRICTS.	SMALLPOX.				SCARLATINA.				DIPHTHERIA AND MEMBRANOUS CROUP.				TYPHOID FEVER.		
	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.
Ashbourne	...	...	...	...	37	...	3.56	...	...	...	...	...	3	...	.28
Bakewell ...	...	...	...	...	42	...	2.29	...	1	...	.05	...	...	...	...
Basford ...	...	...	...	...	3	...	1.74	...	1	...	.58	...	...	...	...
Belper ...	7	...	.28	...	40	1	1.64	2.50	13	1	.53	7.69	2	...	.08
Blackwell ...	47	...	1.00	...	122	...	2.61	...	62	...	1.32	...	4	1	.08
Chapel-en-le-Frith	...	...	...	...	54	1	3.31	1.84	5	...	.30	...	...	...	...
Chesterfield	5	...	.06	...	238	4	2.90	1.68	120	7	1.46	5.83	4	...	.04
Clowne ...	...	...	...	...	73	...	3.95	...	47	4	2.54	8.51	1	...	.05
Glossop Dale	...	...	...	...	5	...	1.33	...	...	...	...	...	2	1	.53
Hartshorne & Seals	...	...	...	...	22	...	2.53	...	...	...	...	...	...	...	...
Hayfield ...	...	...	...	...	3	...	.68	...	6	...	1.37	...	...	...	...
Norton ...	...	...	...	...	13	...	2.72	...	...	...	...	...	...	...	...
Repton ...	1	...	.05	...	125	1	7.10	.80	6	1	.34	16.66	1	1	.05
Shardlow ...	10	...	.27	...	87	...	2.41	...	27	4	.74	14.81	3	...	.08
Sudbury ...	...	...	...	...	2	...	.80	...	...	...	...	...	...	...	...
Rural Districts	70	...	.23	...	866	7	2.92	.80	288	17	.97	5.90	20	3	.06
Urban Districts	156	...	.48	...	959	10	2.99	1.04	312	18	.97	5.76	6	1	.01
Whole County	226	...	.36	...	1825	17	2.96	.93	600	35	.97	5.83	26	4	.04

INFECTIOUS DISEASES GENERALLY.

Small pox.—The following Table shows the number of cases of Small pox notified during the years 1921—1926, inclusive, and shows that although the disease is still prevalent, it is decreasing—

TABLE XIII.

	1921	1922	1923	1924	1925	1926
<i>Urban Districts.</i>						
Alfreton ... ..	...	...	23	1	...	2
Alvaston & Boulton	...	...	...	...	18	1
Belper ... ..	...	1	1	...	2	70
Bolsover ... ..	...	15	19	36	7	19
Chesterfield (Boro')	...	...	32	518	76	2
Clay Cross ... ..	...	...	..	3	52	...
Heage ... ..	...	...	...	...	...	39
Heanor ... ..	...	34	144	11	1	...
Ilkeston (Boro')	...	100	15	3	...	...
Long Eaton ...	14	1	43	12	...	...
Matlocks	1	...	...	...	...	...
Ripley ... ..	...	...	5	1	1	9
Swadlincote ...	...	...	8	135	...	10
Wirksworth ...	...	...	...	...	...	1
<i>Rural Districts.</i>						
Bakewell	1	...	...	...	...	...
Basford	1	2	...	...	...	...
Belper ... ..	...	49	...	...	...	8
Blackwell	1	8	77	154	77	47
Chesterfield ...	...	...	...	216	91	5
Clown ... ..	...	15	86	4	1	...
Hartshorne & Seals	...	...	1	2	...	...
Repton ... ..	...	...	...	5	2	1
Shardlow	3	3	22	22	11	10
TOTALS ...	21	228	486	1123	339	224

TABLE XIV.

SMALL POX AND VACCINATION.

	No. of Cases Notified.	Number		
		Vaccinated and Re- vaccinated.	Vaccinated in Infancy.	Unvac- cinated.
<i>Urban Districts.</i>				
Alfreton	2	—	—	—
Alvaston and Boulton ...	1	—	—	1
Ashbourne	—	—	—	—
Bakewell	—	—	—	—
Baslow	—	—	—	—
Belper	70	—	8	62
Bolsover	19	—	3	16
Bonsall	—	—	—	—
Brampton & Walton ...	—	—	—	—
Buxton (Boro')	—	—	—	—
Chesterfield (Boro') ...	2	—	—	—
Clay Cross	—	—	—	—
Dronfield	—	—	—	—
Glossop (Boro')	—	—	—	—
Heage	39	—	2	37
Heanor	—	—	—	—
Ilkeston (Boro')	—	—	—	—
Long Eaton	—	—	—	—
Matlocks	—	—	—	—
New Mills	—	—	—	—
North Darley	—	—	—	—
Ripley	9	—	2	7
South Darley	—	—	—	—
Swadlineote	10	—	—	—
Wirksworth	1	—	—	1
<i>Rural Districts.</i>				
Ashbourne	—	—	—	—
Bakewell	—	—	—	—
Basford	—	—	—	—
Belper	8	—	1	7
Blackwell	47	—	11	36
Chapel-en-le-Frith	—	—	—	—
Chesterfield	5	—	1	4
Clowne	—	—	—	—
Glossop Dale	—	—	—	—
Hartshorne & Seals ...	—	—	—	—
Hayfield	—	—	—	—
Norton	—	—	—	—
Repton	1	—	—	—
Shardlow	10	—	—	1
Sudbury	—	—	3	7

Scarlet Fever.—During the year 1,825 cases of Scarlet Fever were notified, 17 of which proved fatal, compared with 1,864 cases and 14 deaths in the previous year, making a case mortality during the year of .93 per cent, compared with .70 in 1925.

Whooping Cough.—96 deaths occurred from this disease, giving a death-rate of 0.15 per thousand of the population, compared with 0.12 the rate for the previous year.

Encephalitis Lethargica.

The following Table shows the number of cases of Encephalitis Lethargica notified in the various Sanitary Districts of the County from June, 1920, to December, 1926 :—

TABLE XV.

Districts.	1920 (from June).	1921	1922	1923	1924	1925	1926
URBAN.							
Alfreton ... ..	...	1	...	...	1	1	...
Bakewell ... ..	...	...	1	...	1	...	1
Belper	1	3	...	2	...	...	...
Bolsover	1	...	...	...	...	1	1
Bonsall ... ..	...	...	1	...	...	...	...
Brampton & Walton	...	...	...	...	1	...	...
Buxton Boro' ...	2	...	1	...	2	1	1
Chesterfield Boro'	...	2	...	1	8	11	5
Clay Cross ... ..	...	...	...	...	2	2	...
Dronfield ... ..	...	...	...	...	4	1	...
Glossop Boro' ...	...	...	1	2	2	...	...
Heage ... ..	...	1	...	...	1	...	...
Heanor	2	1	1	...	1	...	...
Ilkeston Boro' ...	1	...	...	...	1	1	...
Long Eaton ...	...	...	1	...	2	1	1
Matlock ... ..	...	1	...	...	...	...	...
New Mills	1	...	...	...	4	4	2
Ripley ... ..	...	...	...	...	2	1	1
Swadlincote ... ..	...	...	...	1	...	...	...
RURAL.							
Bakewell ... ..	...	1	...	...	3	1	...
Belper ... ..	...	...	1	...	6	1	...
Blackwell ... ..	...	1	...	...	6	5	...
Chapel-en-le-Frith	1	...	...	...	2	1	2
Chesterfield ... ..	...	1	1	...	17	9	1
Clown ... ..	...	...	...	...	2	...	1
Hartshorne & Seals	...	...	...	...	...	1	...
Hayfield ... ..	...	1	...	...	3	...	...
Norton ... ..	...	...	...	...	4	...	...
Repton ... ..	...	...	...	...	4	...	...
Shardlow ... ..	...	1	1	...	4	1	...
Sudbury ... ..	...	...	...	...	1	...	...
Totals	9	14	9	6	84	43	16

It is satisfactory to see that the number of cases which occurred during 1926 is considerably less than half that of the previous year, which in its turn was only about half that of 1924.

TABLE XVI.
INCIDENCE OF NOTIFIABLE DISEASES.

	<i>Total Cases notified.</i>	<i>Cases admitted to Hospital.</i>	<i>Total Deaths.</i>
Small pox	224	224	—
Scarlet Fever	1806	1152	17
Diphtheria	607	392	35
Enteric Fever	26	13	4
Puerperal Fever	48	12	18
Pneumonia	648	13	466
Cerebro Spinal Fever	5	—	—*
Erysipelas	201	3	—*
Ophthal. Neonatorum	50	5	—*
Encephalitis Lethargica	30	3	16
Measles	—	—	42
Chicken-Pox	1615	—	—*

*No information available.

CANCER.

The position of the Public Health Service with regard to Cancer was dealt with in my Report for 1925. This year, in Table XVII., which is published each year, there has been added another column showing the actual number of deaths from Cancer in Derbyshire. Table XVIII. shows the incidence of Cancer amongst males and females at varying ages. From this table it will be seen that Cancer in females is most prevalent at the ages of 45—65, whilst in males its prevalence is more marked after the age of 65. This is what one would expect—Cancer is a disease which shews a distinct tendency to occur in degenerating organs whether that degeneration be due to senility or cessation of functional activity. The organs of reproduction and the breasts in the female tend to undergo a degenerative change about the age of 45, and it is then they will show that tendency to cancer which accounts for the increased incidence between the ages of 45 and 60 in females, whilst in the male cancer most frequently occurs as a terminal event in tissues undergoing senile decay. It will be seen that both in males and females, senility is a definite pre-disposing factor in cancer, and there can be no doubt that much of its increased prevalence is due to the fact that the human species generally speaking lives to a greater age than it did.

In my last Annual Report the question of the education of the general public as regards the prospects of cure of cancer in its early stage was discussed. The surgeon's knife is still the surest means of eradicating cancer, and the general public are apparently not acquainted with the large number of successes obtained. The outlook of a person suffering from Cancer in its early stages is by no means as black as is generally thought. The greatest harm which can be done in this connection to-day is to frighten the public. Any disease or condition which kills is a terrible one, but cancer no more so than any other. We are told that 1 out of every 7 of us will die of cancer. Such a statement tends to give rise to undue alarm

and, whilst admittedly tending to make people suspicious of cancer, it unfortunately makes them afraid of it at the same time, and not infrequently we find that the person who is most suspicious of cancer is the last to seek treatment as he has adopted the hopeless policy of "putting off the evil day."

TABLE XVII.

Shewing Death Rate per annum from Cancer in England and Wales and Derbyshire, and number of Deaths from Cancer in Derbyshire since 1901.

Year.	<i>Deaths Rates.</i>		<i>No. of</i>	
	<i>England and Wales.</i>	<i>Derbyshire.</i>	<i>Deaths in Derbyshire.</i>	
1901-1910 ..	0·89 ...	0·667 ...	346 average	
1911 ...	0·99 ...	0·730 ...	410	
1912 ...	1·10 ...	0·728 ...	414	
1913 ...	0·98 ...	0·822 ...	472	
1914 ...	0·98 ...	0·872 ...	507	
1915 ...	0·96 ...	0·830 ...	460	
1916 ...	0·98 ...	0·951 ...	513	
1917 ...	0·99 ...	0·929 ...	489	
1918 ...	0·99 ...	1·022 ...	532	
1919 ...	1·17 ...	0·871 ...	481	
1920 ...	1·16 ...	0·988 ...	559	
1921 ..	1·21 ...	0·990 ...	586	
1922 ...	1·22 ...	0·980 ...	585	
1923 ...	1·26 ...	1·010 ...	606	
1924 ...	1·29 ...	0·990 ...	605	
1925 ...	1·33 ...	0·987 ...	604	
1926 ...	...	1·153 ...	710	

TABLE XVIII.

Table shewing incidence of deaths from Cancer among Males and Females at varying ages.

Year.	AGES.								Totals.		Grand Total
	Under 25		25—45		45—65		65 and over.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1916	6	5	21	38	101	143	96	103	224	289	513
1917	3	5	10	35	102	143	90	101	205	284	489
1918	3	6	13	38	112	153	98	109	226	306	532
1919	5	5	12	37	101	129	85	107	203	278	481
1920	5	2	21	36	114	149	120	112	260	299	559
1921	4	1	24	32	103	152	130	140	261	325	586
1922	3	5	19	34	122	178	105	119	249	336	585
1923	3	3	11	36	126	177	121	129	261	345	606
1924	3	4	15	32	126	149	141	135	285	320	605
1925	2	5	16	29	132	146	139	135	289	315	604
1926	5	5	12	40	148	182	152	166	317	393	710

TABLE XIX.—Enteric or Typhoid Fever.

Year.	Cases.	Case Mortality per cent.	Death Rate per 1,000 pop.	Case rate per 1,000 of population.
1900	678	14·8	·203	1·36
1901	495	15·5	·16	·98
1902	262	17·5	·09	·52
1903	340	10·5	·07	·67
1904	352	15·0	·11	·68
1905	263	17·11	·09	·70
1906	333	15·0	·09	·62
1907	194	18·56	·07	·35
1908	238	15·55	·07	·43
1909	157	15·27	·05	·27
1910	143	12·59	·03	·25
1911	189	15·34	·05	·33
1912	116	21·55	·04	·20
1913	120	20·83	·04	·21
1914	59	13·56	·01	·10
1915	88	22·7	·03	·16
1916	74	22·98	03	·13
1917	52	19·24	02	09
1918	58	25·86	·02	·11
1919	123	12·20	·02	·22
1920	58	13·79	·01	·10
1921	63	12·70	·01	·10
1922	25	8·0	·003	·04
1923	42	16·66	·01	·07
1924	52	7·69	·01	·08
1925	37	8·10	·005	·06
1926	26	15·39	·006	·04

The above Table shows that 26 cases of this disease occurred with 4 deaths, a case mortality of 15·39 as compared with 8·10 in the previous year.

Diphtheria.—The number of cases of diphtheria notified during 1926 was 600 compared with 686 in the previous year, whilst the number of deaths was 35 compared with 52. The case mortality during 1926 was 5·83 as compared with 7·57 the rate for 1925.

The number of specimens received at the County Laboratory for examination for the diphtheria bacillus during the past four years. is as follows :—

1923	...	...	2,772
1924	...	...	4,031
1925	...	...	5,802
1926	...	...	6,102

Measles.—The total number of deaths from Measles during the year was 42, as compared with 69 in the previous year. Of these deaths, 10 occurred in the Borough of Chesterfield and 12 in the Chesterfield Rural District.

INFECTIOUS DISEASES IN SCHOOLS.

See pages 89, 95, 96 and 97 of the School Section of this Report for:—

Exclusion of individual children.

No. of Schools Closed.

Sanitary Conditions and Water Supply of Schools and School Hygiene generally.

BACTERIOLOGICAL LABORATORY.

During the year 12,258 specimens for bacteriological examination were examined at the County Laboratory, compared with 13,141 in the previous year. The following Table shows the origin of the specimens:—

TABLE XX.

Medical Practitioners	...	...	...	...	3,813
School Medical Staff	...	...	...	...	1,203
Dispensary Staff ...	...	...	...	...	1,127
Hospitals (Isolation and others)	...	...	...	...	2,446
Venereal Diseases	...	...	...	...	2,322
Hairs for Ringworm	...	...	...	...	174
Local Authorities:—					
Milk Inoculations. Tuberculosis Order.	...	...	...	...	136
Milk Inoculations. Ordinary	...	...	...	...	193
Milk for Bacterial Count and Bacillus Coli	...	...	...	...	304
Milk, Direct Examinations. Tuberculosis Order	...	...	...	...	145
Outside Authorities:—					
Milk Inoculations. Derby Borough	...	...	...	...	40
Milk Inoculations. Leicestershire	...	...	...	...	3
Miscellaneous. Derby Borough	...	...	...	...	196
Examinations for which a fee is paid	...	...	...	...	156
Total					12,258

The number of specimens sent in by Medical Practitioners from the Urban Districts was 5.92 per thousand of the population, and in the Rural Districts it was 6.48.

TABLE XXI.—Bacteriological Specimens Examined.

Districts.	Population.	No. of Specimens sent.	Rate per 1,000.
URBAN.			
Alfreton	21,970	50	2.27
Alvaston & Boulton	1,686	20	11.86
Ashbourne	4,625	18	3.89
Bakewell	3,002	14	4.66
Baslow	854	9	10.54
Belper	12,990	116	8.92
Bolsover	12,590	63	5.00
Bonsall	1,186	5	4.21
Brampton & Walton	2,149	15	6.98
Buxton (Boro')	16,090	70	4.35
Chesterfield (Boro')	66,650	299	4.48
Clay Cross	9,194	46	5.00
Dronfield	4,399	26	5.91
Glossop (Boro')	19,490	423	21.71
Hoage	4,443	16	3.60
Heanor	21,680	93	4.29
Ilkeston (Boro')	32,960	104	3.15
Long Eaton	21,750	224	10.30
Matlocks	9,654	23	2.38
New Mills	8,901	87	9.77
North Darley	3,729	6	1.61
Ripley	13,890	41	2.95
South Darley	675	—	—
Swadlincote	21,590	102	4.72
Wirksworth	3,953	46	11.64
<i>Urban Districts</i>	320,100	1,896	5.92
RURAL.			
Ashbourne	10,390	48	4.62
Bakewell	18,330	70	3.82
Basford	1,720	1	0.58
Bolper	24,270	164	6.75
Blackwell	46,660	255	5.46
Chapel-en-le-Frith	16,300	56	3.43
Chesterfield	81,920	260	3.17
Clowne	18,470	86	4.65
Glossop Dale	3,748	25	6.66
Hartshorne & Seals	8,665	13	1.50
Hayfield	4,349	29	6.66
Norton	4,762	21	4.40
Repton	17,600	550	31.25
Shardlow	36,020	355	9.29
Sudbury	2,496	4	1.60
<i>Rural Districts</i>	295,700	1,917	6.48
<i>Urban Districts</i>	320,100	1,896	5.92
WHOLE COUNTY	615,800	3,813	6.19

TABLE XXII.—Specimens received from Medical Practitioners during 1926.

Districts.	Enteric Fever.		Diphtheria.		Phthisis.		Miscellaneous		Total	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
URBAN.										
Alfreton .. ..	..	..	2	14	3	29	..	2	5	45
Alvaston & Boulton ..	..	..	1	6	1	6	3	3	5	15
Ashbourne .. ..	..	..	2	4	2	6	2	2	6	12
Bakewell .. ..	..	..	..	10	1	3	..	..	1	13
Baslow .. ..	..	..	1	5	..	1	2	..	3	6
Belper	1	7	6	44	4	47	1	6	12	104
Bolsover .. ..	..	5	12	32	..	13	1	..	13	50
Bonsall .. ..	..	..	..	3	..	1	1	..	1	4
Brampton & Walton ..	..	..	2	1	2	10	..	..	4	11
Buxton (Boro') .. ..	..	9	5	24	3	26	2	1	10	60
Chesterfield (Boro') ..	2	17	22	138	18	89	5	8	47	252
Clay Cross .. ..	..	5	..	7	3	30	..	1	3	43
Dronfield .. ..	..	..	2	4	..	20	..	..	2	24
Glossop (Boro')	1	3	48	321	6	42	..	2	55	368
Heage	2	2	..	1	2	6	3	..	7	9
Heanor	2	2	..	20	8	48	10	3	20	73
Ilkeston (Boro') .. ..	..	..	..	32	5	60	4	3	9	95
Long Eaton .. ..	..	..	46	95	10	68	5	..	61	163
Matlock	1	7	..	4	1	6	3	1	5	18
New Mills .. ..	..	4	4	53	7	15	1	3	12	75
North Darley	1	2	..	3	..	..	..	..	1	5
Ripley .. ..	..	..	1	3	2	31	3	1	6	35
South Darley .. ..	..	..	..	..	..	..	..	..	..	..
Swadlincote .. ..	..	5	1	14	7	64	6	5	14	88
Wirksworth .. ..	..	..	..	9	..	9	4	4	4	22
<i>Urban Districts</i>	10	68	155	847	85	630	56	45	306	1590
RURAL.										
Ashbourne	2	4	..	9	..	19	6	8	8	40
Bakewell .. ..	..	..	1	22	2	24	16	5	19	51
Basford .. ..	..	..	..	1	..	..	..	..	..	1
Belper .. ..	..	2	8	38	5	61	25	25	38	126
Blackwell	2	6	18	72	18	128	3	8	41	214
Chapel-en-le-Frith ..	..	..	4	16	4	28	2	2	10	46
Chesterfield	1	10	25	77	18	124	2	3	46	214
Clowne .. ..	..	2	12	29	3	40	..	..	15	71
Glossop Dale	2	10	..	2	..	9	1	1	3	22
Hartshorne & Seals ..	..	..	..	1	2	9	..	1	2	11
Hayfield .. ..	..	..	1	13	1	12	1	1	3	26
Norton .. ..	..	1	..	1	3	6	5	5	8	13
Repton	2	18	10	466	4	22	17	11	33	517
Shardlow	2	9	45	149	15	66	25	25	86	249
Sudbury .. ..	..	..	..	1	1	..	..	2	1	3
<i>Rural Districts</i> ..	11	62	124	897	76	548	102	97	313	1604
<i>Urban Districts</i> ..	10	68	155	847	85	630	56	45	306	1590
<i>Whole County</i> ..	21	130	279	1744	161	1178	158	142	619	3194

TABLE XXIII.—Specimens received from Hospitals, 1926.

Hospital.	Enteric Fever.		Diphtheria.		Phthisis.		Miscellaneous.		Total	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Belper .. ..	..	4	14	136	..	..	..	..	14	40
Buxton .. ..	..	..	..	2	..	..	..	..	..	2
North Dorbyshire Royal Hospital..	..	..	..	1	..	..	..	..	..	1
Draycott .. ..	..	..	51	114	..	..	..	..	51	114
Dronfield	1	2	33	105	..	..	1	3	35	110
Etwall .. ..	..	..	5	30	..	..	..	..	5	30
Gamesley .. ..	..	..	75	238	..	..	..	3	75	241
High Peak .. ..	..	..	48	373	..	..	..	2	48	375
Ilkeston Sanatorium..	..	..	1	21	..	..	..	..	1	21
Langwith	2	13	19	101	..	..	..	..	21	114
Mastin Moor	1	..	87	259	..	..	..	..	88	259
Morton	2	1	34	326	..	..	..	5	36	332
Penmore .. ..	..	..	31	302	..	..	..	..	31	302
Totals	6	20	398	2008	..	..	1	13	405	2041

Venereal Diseases Specimens.

TABLE XXIV.

The following Table shows the number of specimens sent in under the V.D. Scheme for Examination during the year 1926 :—

Blood for Wassermann reaction	...	...	...	1,965
Pus for Gonococci	...	...	...	338
Serum for Spirochætes	...	...	...	4
Cerebro-Spinal Fluid for Cell Count	...	...	...	5
do. do. Globulin	..	..	..	5
Miscellaneous	...	...	...	5
Total	...	...	...	2,322

TABLE XXV.

The following Table shows the number of Specimens received from the Dispensaries and Sanatoria during 1926 :—

Dispensary or Institution.	Sputa.		Miscellaneous.		Total.
	Pos.	Neg.	Pos.	Neg.	
Ashbourne	5	26	..	..	31
Burton-on-Trent ..	12	59	..	..	71
Chesterfield	45	171	..	..	216
Chinley	23	103	..	3	129
Derby	41	193	6	32	272
Glossop	19	83	5	..	107
Ilkoston	19	41	..	..	60
Long Eaton	11	65	..	..	76
Matlock	12	71	3	3	89
Penmore Pavilion ..	30	10	..	..	40
Dorbyshire Sanatorium	..	1	18	15	34
Brethby Hall .. ..	..	..	..	2	2
Totals	217	823	32	55	1127

TABLE XXVI.

School Specimens.—The following is a list of the School Specimens received during the year 1926:—

			Pos.		Neg
Swabs for Diphtheria	..	..	25	..	648
Hair for Ringworm	..	..	273	..	164
Miscellaneous	..	..	27	..	66
			<hr/> 325		<hr/> 878
Total	..	..	1,203		

Tubercle in Milk.

During the year 372 samples of milk were examined for the presence of tubercle bacilli by animal inoculation. 41 samples, or 11.02 per cent. were found to contain tubercle bacilli.

During 1926, 152 samples of milk were submitted for bacterial counts. Of this number 121 came within the limits of Grade A milk.

The following Table gives details of the examinations:—

TABLE XXVII.

LIMIT OF BACTERIAL CONTENT FOR GRADE A MILK.

	Up to 10,000.	Over 10,000 and up to 20,000.	Over 20,000 and up to 50,000.	Over 50,000 and up to 100,000.	Over 100,000 and up to 200,000.	Over 200,000 and up to 1,000,000.	Over 1,000,000.
Tests (Total 152)	25	34	30	22	10	18	13
t Bacterial Count	10,000	20,000	50,000	100,000	200,000	800,000	7,000,000
Bacterial Count	Nil	11,000	21,000	52,000	103,000	212,000	1,022,000
ge Bacterial Count	5,877	12,794	34,100	69,227	152,000	484,833	3,488,692

DILUTION OF MILK IN WHICH BACILLUS COLI WAS FOUND :

(152 Milks examined.)

Dilution.	Positive.	Negative.	Total.	Percentage with <i>B. Coli</i>
0.01 c.c.	...	39	113	152
				25

THE WASSERMANN REACTION. Comparison of different methods.

In June 1926, Lt. Colonel Harrison, of the Ministry of Health, asked the Derbyshire County Council laboratory to co-operate with him in a series of blood tests for the comparison of the delicacy of the different methods of conducting the Wassermann test.

One hundred sera were sent in batches of 6—12 weekly for several months to the laboratory, and samples of the same sera to Dr. Wyler at St. Thomas' Hospital, London, no information as to the clinical condition of the patient being sent to either laboratory. The Derbyshire County Council laboratory employed Dean's method and Dr. Wyler, Harrison's No. 1 method and the Sigma method of test.

On the completion of the work the results were reviewed by Lt. Colonel Harrison, who writes :—" You will see that there is very close agreement between your work and Dr. Wyler's and any difference seems to be of comparative unimportance."

MATERNITY AND CHILD WELFARE.

MIDWIVES ACTS, 1902 & 1918.

At the end of 1925 there were 365 midwives on the County Roll, 277 were trained midwives: of these 81 were District Nurse-midwives.

The following changes of midwives took place during 1926 :—

Deaths of Midwives	...	...	...	...	...	5
No. of Midwives who have retired from practice voluntarily, whose certificates have been cancelled by the Board	...	...	...	...	...	6
No. of trained Midwives who have left the County, of whom 11 were District Nurse Midwives	...	...	...	...	...	14
No. of Midwives who have done temporary duty for District Nurses	...	...	...	...	...	22
No. of other temporary Midwives	...	...	...	...	...	4
No. of new Midwives enrolled	...	...	...	...	...	43

PUERPERAL FEVER :—

	Number of Midwives.	Number of Confinements.	Puerperal Fever Cases.	Cases per 1,000 Births.
Bonafide Midwives	88	2152	8	3.71
Trained Midwives, including District Nurse-Midwives	277	5906	17	2.87
	365	8058	25	3.10

During 1926, information was received concerning 39 women who died within six weeks of child-birth. The causes of death were as follows :—

Puerperal Fever	...	...	...	...	15
Kidney Conditions	...	...	...	...	7
Hæmorrhage	...	...	...	...	3
Cardiac Conditions	...	...	...	...	2
Respiratory Conditions	...	...	...	...	4
Pumonary Embolism	...	...	...	...	4
Cerebral Embolism	...	...	...	...	1
Various Diseases	...	...	...	...	3

Of these deaths, 20 occurred in hospitals or Maternity Homes.

During 1926, with the approval of the Ministry of Health, forms of inquiry into maternal deaths were sent to the Doctors certifying these in 26 cases and were returned completed in 20 cases. A fee of 5s. was paid for each report received.

The following Table gives the records received, the cases of Puerperal Fever and Puerperal Pyrexia in the practice of midwives only, and all cases of Ophthalmia Neonatorum, whether in the practice of doctors or midwives, with the corresponding figures for previous years :—

TABLE XXVIII.

	1922	1923	1924	1925	1926
<i>RECORDS—</i>					
Medical Help	... 1229	1240	1353	1414	1565
Still Births	... 151	173	158	178	127
Deaths of Children	28	23	30	32	26
„ Mothers ..	1		3	2	2
Laying out the Dead	15	22	21	15	14
Liability to be a source of Infection	... 50	31	53	44	45
Notification of Artificial Feeding (^{within 10} _{days.})	... 120	89	108	85	96
<i>Puerperal Fever :</i>					
Midwives cases	... 17	11	22	19	25
<i>Puerperal Pyrexia :</i>					
Midwives cases	... ..	...	...	...	15
<i>Ophthalmia Neonatorum :</i>					
ALL Cases	... 50	55	67	47	53

The following is an analysis of the 1,565 Medical Help records :—

Abortion or Miscarriage	...	...	79
Varicose Veins	...	...	6
Ante-partum Hæmorrhage	...	...	51
Deformed Pelvis	...	...	9
Discharge during Pregnancy	...	...	5
Retarded Labour	...	...	387
Abnormal Presentation	...	...	109
Retained Placenta	...	...	70
Lacerated Perinæum	...	...	256
Still Birth	...	...	39
Fits or Convulsions during Labour			2
Post-partum Hæmorrhage	...	...	58
Rise of Temperature	...	...	51
White Leg	...	...	8
Fits or Convulsions during Lying-in			
Period	...	...	5
Prolapse of Cord	...	...	8
Injuries or Malformations	...	...	22
Dangerous Feebleness	...	...	122
Eyes, Condition of	...	...	55
Skin Eruption	...	...	12
Navel, condition of	...	...	3
Miscellaneous	...	...	208
Total	...	...	1565

Inspections made—

Inspection Forms marked	“ Good ”	...	652
“ ”	“ Satisfactory ”	...	282
“ ”	“ Indifferent ”	...	17
“ ”	“ Bad ”	...	3
Number of other Inspections and Visits		...	94
“ ”	visits where Midwives were out	...	106
Total	...	...	1,154

Midwives suspended from practice for being in contact with :—

Puerperal Fever	...	...	...	10
Puerperal Pyrexia	...	...	...	1
Scarlet Fever	...	...	...	1
Smallpox	...	...	...	1
Erysipelas	...	...	...	1
Purulent Discharge	...	...	...	2
Typhoid Fever	...	...	...	1
Whooping Cough	...	...	...	1
Measles	...	...	...	2
				20

Special Letters of Warning.—23 special letters of warning were sent to midwives in the County for breaking rules of the Central Midwives Board. 4 letters of warning were sent to uncertified women.

MIDWIVES ACTS, 1902 & 1918

AND

MIDWIVES & MATERNITY HOMES ACT, 1926.

Subsidised Midwifery.—During the financial year ended March 31st, 1927, 9 midwives received subsidies varying from £15 to £50, under the conditions set out in the Survey Report, 1925, page 109.

In 1926 there were 89 Nursing Associations in the County employing 99 nurses; of these 70 acted as district nurse-midwives.

Payment of Doctors' Fees under Section 14 (1) of the Midwives Act, 1918.

In respect of the year ended March, 1927, 518 claims were received from Medical Practitioners, of which 486 were passed for payment amounting to £758 14s. 3d. Returns from patients for the same period amounted to £144 11s. 0d.

In this connection it should be noted that the Midwives and Maternity Homes Act, 1926 makes it a condition that claims for payment of doctor's fees under Section 14 (1) of the Act of 1918, must be made within a period of two months from the date on which the doctor was called in. This provision was brought to the notice of all practitioners in Derbyshire by means of a circular letter sent from my Office in September 1926.

The Practice of Midwifery by Uncertified Midwives was dealt with in my Survey Report for 1925, and it was pointed out at that time that legislation governing the practice of midwifery was likely to come into force. Such legislation has now become a fact in the form of the Midwives and Maternity Homes Act, 1926. The provisions of this Act were sent to each Doctor and midwife in the County in the form of a Circular, set out below, which details the provisions of the Act. In addition this Circular explains the procedure under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926 and the Public Health (Ophthalmia Neonatorum) Regulations, 1926.

“ Derby.

28th September, 1926.

Dear Sir or Madam,

As you are probably aware, there has recently been passed the Midwives and Maternity Homes Act, 1926, and there has been issued from the Ministry of Health the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926.

These contain many matters which intimately concern the Medical Practitioners on the one hand and the County Council on the other, and for your guidance I am setting out below the main provisions of the Act and Regulations as they will affect Medical Practitioners.

THE MIDWIVES AND MATERNITY HOMES ACT, 1926.

Section 1 amends Section 1 (2) of the Act of 1902 in the following respects, with the object of removing the difficulties which have been experienced in preventing the practice of midwifery by unqualified persons :—

- (a) It is no longer necessary, in order to secure a conviction, to prove that an uncertified woman has attended women in childbirth “ habitually and for gain.”
- (b) The “ personal supervision ” as well as the “ direction ” of a qualified medical practitioner is now made a condition of avoiding liability under the sub-section.
- (c) Male persons as well as uncertified women are now brought within the scope of the enactment.
- (d) An unqualified person who attends a woman in childbirth will not be liable to penalty if he or she satisfied the court that the attention was given in a case of sudden or urgent necessity.
- (e) The provisions of the sub-section do not apply to persons undergoing recognised courses of instruction in midwifery with a view to becoming medical practitioners or certified midwives.

Section 2 (2) amends section 14 (2) of the Act of 1918 by requiring, as a condition of the payment of his fee, that a medical practitioner who has been called in to the assistance of a midwife in a case of emergency shall submit his claim to the Local Supervising Authority within a period of *two months* from the date on which he was called in.

That part of the Act referring to the registration of Maternity Homes makes it an offence for any person on or after January 1st, 1927 to carry on a Maternity Home unless that person is registered in respect of that Home. Application for registration must be made to the Local Supervising Authority (i.e. the County Council) in writing in the form prescribed by the Minister of Health, and must be accompanied by a fee of 5s. The expression “ Maternity Home ” means any premises used or intended to be used for the reception of pregnant women or of women immediately after childbirth, but shall not include any hospital or other premises maintained or controlled by a Government Department or local authority, or by any other body or persons constituted by special Act of Parliament or incorporated by Royal Charter.

The first part of the Act, referring to unqualified practice and doctors’ fees, is now in force. That portion of the Act relating to Maternity Homes comes into force on January 1st, 1927.

PUBLIC HEALTH (NOTIFICATION OF PUERPERAL FEVER AND PUERPERAL PYREXIA) REGULATIONS, 1926.

These Regulations prescribe new forms for the notification of cases of Puerperal Fever, and also require the notification of cases of Puerperal Pyrexia (see definition below) in addition to the present notification of Puerperal Fever under the Infectious Diseases (Notifications Act), thus placing an obligation upon medical practitioners to notify all cases of pyrexia during the puerperium, irrespective of the cause to which the fever may be attributed. The notifications should be made to the local Medical Officer of Health. Copies of the forms of notification will be supplied to practitioners by the local District Council. The fee for notifying a case of Puerperal Fever or Puerperal Pyrexia is 2s. 6d. and is payable by the local District Council.

“ Puerperal Pyrexia ” is defined as “ any febrile condition (other than a condition which is required to be notified as puerperal fever) occurring in a woman within 21 days after childbirth or miscarriage in which a temperature of 100·4° Fahr. (38° Centigrade) or more has been sustained during a period of 24 hours or has recurred during that period.”

PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1926.

Under these Regulations the duty of notifying to the local Medical Officer of Health a case of Ophthalmia Neonatorum is placed solely upon the medical practitioner in attendance, and the midwife is relieved of this duty. However, the midwife is not relieved from the duty of calling in medical assistance in the case of a discharge from an eye, *however slight*, and of notifying the County Medical Officer that such assistance has been called in. The fee for notifying a case of Ophthalmia Neonatorum is 2s. 6d. which is payable by the local District Council.

TREATMENT OF CASES OF PUERPERAL FEVER AND OPHTHALMIA NEONATORUM.

It has been suggested by the Ministry of Health that the local Authority responsible for Maternity and Child Welfare in an area shall consider the possibilities of providing treatment for such cases. At the present moment no definite plans to this end have been adopted and I have been instructed by the County Council to explore the possibilities of providing adequate treatment throughout that area of the County in which the County Council are the authority under the Maternity and Child Welfare Act.

I am,

Yours faithfully,

W. M. ASH,
County Medical Officer.”

Puerperal Fever and Ophthalmia Neonatorum.—With reference to the treatment of these two diseases, a scheme is in course of preparation and will be placed before the Maternity and Child Welfare Committee for their approval early in 1927.

Home Visits.—During the year 1926, 94,892 visits were paid by the Health Visitors to the homes of children under five years of age. Of these, 44,334 were to homes of infants under 1 year of age.

Voluntary Societies.—In accordance with the Rules laid down by the County Council, an annual grant of £10 has been made to 4 District Nursing Associations towards the expenses of running Infant Welfare Centres in the smaller villages, during 1926.

Maternal Mortality.—The Maternal mortality rate for the County for 1926 was 4·56 compared with 3·84 in 1925.

The following Table gives the Maternal Mortality rate in the County since 1916 :— **TABLE XXIX.**

Year	Deaths from Puerperal Fever.	Rate per 1000 Births	Deaths from other accidents and Diseases of Pregnancy & Parturition	Rate per 1000 Births.	Total.	Rate per 1000 Births	No. of Births.
1916	19	1·45	45	3·43	64	4·88	13,109
1917	14	1·18	33	2·79	47	3·97	11,831
1918	10	·82	27	2·23	37	3·05	12,103
1919	15	1·26	40	3·38	55	4·64	11,838
1920	22	1·41	45	2·89	67	4·30	15,572
1921	12	·83	33	2·29	45	3·12	14,417
1922	17	1·30	35	2·67	52	3·97	13,095
1923	18	1·42	46	3·62	64	5·04	12,681
1924	17	1·34	32	2·53	49	3·87	12,615
1925	17	1·36	31	2·48	48	3·84	12,491
1926	18	1·52	36	3·04	54	4·56	11,845

Puerperal Fever.—The following Table gives the Puerperal Fever case rate among midwives and doctors :—

TABLE XXX.

Year.	MIDWIVES' CASES.			DOCTORS' CASES.		
	No. of Births.	P.F. Cases.	Rate per 1,000 Births.	No. of Births.	P.F. Cases.	Rate per 1,000 Births.
1913	11,017	20	1·81	3,686	11	2·98
1914	11,649	16	1·37	3,220	27	8·38
1915	10,514	22	2·09	3,277	24	7·32
1916	10,139	18	1·77	2,970	6	2·02
1917	9,130	17	1·86	2,701	5	1·85
1918	9,321	9	·96	2,782	11	3·95
1919	9,512	6	·63	2,326	18	7·74
1920	12,222	14	1·14	3,350	27	8·06
1921	10,954	12	1·09	3,463	18	5·19
1922	10,168	17	1·67	2,927	13	4·44
1923	9,867	11	1·11	2,814	20	7·10
1924	9,119	22	2·41	3,496	12	3·43
1925	9,408	19	2·02	3,083	23	7·45
1926	8,058	25	3·10	3,787	23	6·07

Provision of Free Milk.—In respect of the financial year ended March 31st, 1927, 145 applications for free milk were received. Of these, 122 were for fresh milk and 23 for dried milk. The expenditure was £32 17s. 7d. for fresh milk and £3 16s. 9d. for dried milk.

TUBERCULOSIS SCHEME.

The Tuberculosis scheme was explained fully in the Survey Report for 1925.

The Institutional Unit comprises three Institutions :—

1. Walton Sanatorium.
2. Penmore Pavilion.
3. Brethby Hall Orthopædic Hospital (opened April, 1926).

WALTON SANATORIUM.

This institution contains 124 beds for the treatment of pulmonary tuberculosis in both males and females. The accommodation up to the end of 1926 was allotted as to 50 beds for females and 74 for males, but an alteration in this arrangement will be made during 1927 so as to more nearly equalise the numbers of males and females accommodated, and to provide for the treatment of cases of advanced pulmonary tuberculosis in males.

Details regarding this Institution were given in the Survey Report for 1925.

The Medical Superintendent, Dr. A. Niven Robertson, reports on the work at the Sanatorium during the year 1926, as follows :—

Statistics.

319 patients were admitted.

Males **133.** Females **108.** Children **78.**

338 patients were discharged.

Males **142.** Females **104.** Children **92.**

Average number of beds occupied—**120·3.**

Average length of stay of the patients—**120** days.

Average weight gained by the patients—**8lbs. 11ozs.**

MINISTRY OF HEALTH CLASSIFICATION.

TABLE D.S. 1.

PULMONARY.				M.	F.	C.
1. CLASS T.B. MINUS	...	...	...	26	25	38
2. CLASS T.B. PLUS	...	...	...
Group I.	...	...	...	35	6	26
Group II.	...	...	...	56	44	10
Group III.	...	...	...	18	25	6
3. NON-PULMONARY						
Bones and Joints	...	...	...	...	...	1
Abdominal	...	...	...	1	...	...
Other Organs	...	...	...	...	...	...
Peripheral Glands	...	...	...	...	1	2
Total	...	...	...	136	101	83
Total				..	...	.. 320

SOCIETY OF MEDICAL SUPERINTENDENTS
CLASSIFICATION.

TABLE D.S. II.

		Without T.B. in Sputum.			With T.B. in Sputum,			Grade of Hilus Cases.		
		M.	F.	C.	M.	F.	C.	A.	B.	C.
<i>STAGE I.</i>										
Grade	A.	17	16	3	32	5	5			
"	B.	0	0	1	2	1	1			
"	C.	0	1	0	0	2	1			
<i>STAGE II.</i>										
Grade	A.	5	5	2	24	14	2			
"	B.	0	0	0	4	5	1			
"	C.	0	0	0	5	3	0			
<i>STAGE III.</i>										
Grade	A.	4	1	0	22	8	3			
"	B.	0	0	0	9	14	2			
"	C.	0	0	0	10	23	4			
Total		26	23	6	108	75	19	60	3	0

Total—320 cases discharged.

RESULTS OF TREATMENT (Table III, Memo. 37/T Ministry of Health).
DURATION OF RESIDENTIAL TREATMENT. Table D.S. III.

DURATION OF RESIDENTIAL TREATMENT

Table D.8. 111.

[illegible]

General Results of Treatment.

Quiescent	...	...	...	...	87
Improved	...	...	...	...	193
No material improvement	...	...	...	...	32
Died in institution	...	...	...	...	8
					<hr/>
					320
					<hr/>

In addition to the treatment of pulmonary tuberculosis, 66 patients were treated by artificial sunlight, and of these 9 were out-patients. Of the 66 cases treated, 3 were cured, 24 were much improved, 30 were improved or are improving, 8 were stationary and 1 died.

Artificial Pneumothorax.—During the year 9 new cases were commenced on this treatment and 4 old cases were continued. 116 operations for refills were performed, and 21 gas replacements for fluid.

Meteorological Observations.—We have now carried out very complete and accurate observations of the meteorological conditions at this Sanatorium for a period of 3 years.

If similar observations were carried out or completed at other Sanatoria I would suggest that the results be collected, thus forming what one might call a "meteorological census" of all Sanatoria in Britain. It would be a most useful guide to Medical Superintendents, specialists and general practitioners, who wished to secure the climatic treatment appropriate for their patients.

Certain patients with early disease require a cold, tonic, stimulative climate which increases their metabolism; others with asthma and bronchitis, for example, require a warmer climate. A high cooling power with radiant heat will suit the former. An equable radiant heat but not too high a cooling power or wind velocity, will probably suit the latter better. At present, patients are sent from one Sanatorium to another with no accurate knowledge of the climate at the actual Sanatorium. For example, a bronchitis may be sent to a Sanatorium in a watering place in the south. We know the presumed climate from the records of the watering-place, but the weather record of the actual Sanatorium may be quite different from that of the place itself. Cooling power may in a very windy area be reduced to almost nil owing to protection of the Sanatorium by trees, or by a hill. This lack of exposure may increase the tendency to hæmoptysis. The Sanatorium may be built facing the prevailing rainy winds, or it may be on a different soil, or it may have excessive radiant heat by being placed under a cliff facing south, or it may have less ultra-violet light by local mists in a valley. The local variations within a small radius are endless, and well-marked.

Before sending a patient for a "change of air" we ought to know the exact climate of the actual spot on which the Sanatorium is placed, and where the patient will live and sleep. For this purpose a scientific knowledge of the meteorological conditions at all the Sanatoria in Britain would be most useful.

The necessary facts having been obtained, a meteorological directory of British open-air Sanatoria could be compiled as a guide to climatic treatment.

Meteorological Data for 1926.

Highest Wind	Feb. 27th=18·30.
Highest Dry Kata	March 3rd-9th, Oct. 9th, Dec. 3rd=44.
Highest Wet Kata	March 3rd=98.
Lowest Dry Kata	July 14th=3.
Lowest Wet Kata	July 30th, Sept. 2nd=22.
Highest Outdoor Temp.	3 p.m. July 14th=84°F.
Lowest Outdoor Temp.	3 p.m. Jan. 15th=27°F.
Highest Radiant Heat	July 1st=131·0°F.
Largest amount of ultra-violet light	Sept. 4th.
Largest Rainfall	Nov. 1st=.77 ins.
Highest Max. Temp.	July 14th=85°F.
Lowest Min. Temp.	Jan. 16th-17th=16°F.

August had the greatest radiant heat and ultra-violet radiation. November was the wettest month and March was the windiest.

DERBYSHIRE SANATORIUM.

TABLE D.S. IV.

Comparative Statement of Cost.

	Year ending March 31st,					1927.				
	1923.					1926.				
	1924.					1925.				
Average daily number of Patients	115.6	117.8	...	123.8	124.4	...	124.4	...	118.4	...
do. do. Staff	32.0	32.5	...	33.8	35.9	...	35.9	...	35.8	...
	Cost per week per Patient.		Total Cost.		Cost per week per Patient.		Total Cost.		Cost per week per Patient.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Salaries and Wages	3,306	0 10 11½	3,509	0 11 4½	3,644	0 11 3½	3,803	0 11 8½	4,061	0 13 2
Provisions	4,103	0 13 7½	4,126	0 13 5	4,071	0 12 7	4,150	0 12 9½	4,031	0 13 0½
Drugs and Medical Appliances	478	0 1 7	578	0 1 10½	442	0 1 4½	436	0 1 4	497	0 1 7½
Fuel, Light and Water	1,247	0 4 11½	1,369	0 4 5½	1,507	0 4 8	1,237	0 3 9½	1,650	0 5 4
Domestic and Laundry	636	0 2 1½	610	0 2 0	499	0 1 6½	569	0 1 9½	653	0 2 1
Renewals and Repairs	255	0 0 10	556	0 1 9½	752	0 2 4	793	0 2 5½	273	0 0 10½
Miscellaneous	539	0 1 9½	483	0 1 6½	501	0 1 6½	439	0 1 4½	429	0 1 4½
Rates, Taxes and Insurance	629	0 2 1	584	0 1 10½	634	0 1 11½	614	0 1 10½	711	0 2 3½
Loan Repayment and Interest	955	0 3 2	955	0 3 1	955	0 2 11½	944	0 2 11	991	0 3 2½
Capital Expenditure out of Revenue (garage)	—	—	—	—	—	—	182	0 0 6½	—	—
Gross Totals	12,148	2 0 3½	12,770	2 1 5	13,005	2 0 3	13,167	2 0 7	13,296	2 3 0
Deduct Profit on Farm Account	140	0 0 5½	94	0 0 3½	107	0 0 4	131	0 0 5	—	—
Deduct other Income	31	0 0 1	39	0 0 1½	31	0 0 1	29	0 0 1	139	0 0 5
Net Cost	11,977	1 19 9	12,637	2 1 0	12,867	1 19 10	13,007	2 0 1	13,157	2 2 7
Food per person per week	...	10/8d.	...	10/6d.	...	9/11d.	...	9/11d.	...	10/-

METEOROLOGICAL TABLES, 1

	Cooling Power.				Difference between W.K. & D.K.			Wind Mls. per hr.			Rain in inches.			Relative Humidity.			Barometric Pressure.	
	Dry Kata.		Wet Kata.		1924.	1925.	1926.	1924.	1925.	1926.	1924.	1925.	1926.	1924.	1925.	1926.	1924.	1925.
	1924.	1925.	1924.	1925.														
Jan. ...	27	25	28	54	56	55	27	31	27	27	5.37	8.45	6.98	2.09	3.15	3.2	29.51	29.43
Feb. ...	29	27	25	59	56	49	30	29	30	24	7.36	7.87	6.70	.75	3.97	1.8	30.23	28.94
Mar. ...	25	25	27	63	53	56	38	28	38	29	6.65	6.12	8.03	.93	.97	1.0	29.47	29.62
April ...	24	23	19	53	51	42	29	28	29	23	7.34	6.27	5.16	2.26	2.68	2.38	29.47	29.29
May ...	20	20	20	46	46	43	26	26	26	23	7.29	6.61	5.26	3.71	3.72	2.88	29.42	29.25
June ...	17	17	17	42	37	39	25	20	25	22	7.09	4.28	5.24	2.32	.18	2.12	29.53	29.62
July ...	16	14	13	43	57	34	27	43	27	21	7.90	5.87	4.86	4.28	1.15	2.54	29.36	29.39
Aug. ...	18	16	15	42	38	36	24	22	24	21	7.36	5.69	5.75	2.73	2.16	2.80	29.36	29.45
Sept. ...	20	20	16	45	43	37	25	23	25	21	7.91	5.92	5.08	2.21	3.07	1.26	29.29	29.41
Oct. ...	19	21	20	41	43	42	22	22	22	22	5.13	6.65	4.81	4.71	3.43	2.82	29.41	29.38
Nov. ...	22	23	25	47	45	50	25	22	25	25	4.97	3.97	5.99	1.80	1.97	4.31	29.48	29.4
Dec. ...	26	32	26	50	56	52	24	24	24	26	6.43	6.63	5.99	3.18	2.56	1.51	29.35	29.15

1-1926.

TABLE D.S. V.

i.	Temp. Fahr. 3 p.m.			Radiant Heat. Fahr. 3 p.m.			Difference between Ord. Temp. & Rad. Ht.			Ultraviolet Light.			Patients gain in weight in ozs.			
	1924.	1925.	1926.	1924.	1925.	1926.	1924.	1925.	1926.	1924.	1925.	1926.	1924.	1925.	1926.	
4	40	42	41	—	44.3	42.4	—	2.3	1.4	—	5	10½	26	28.6	36.2	Jan.
7	40	44	45.6	—	52.4	48.8	—	8.4	3.2	—	6½	10½	32.5	43.9	14.6	Feb.
1	46	43	46.1	—	55.7	52.4	—	12.7	6.3	—	4½	16	29	35.8	21.7	Mar.
3	50	49.7	53.5	66	66.4	66.0	16	16.7	12.5	—	6½	58	38.3	24.5	39.2	April
7	58	58.7	54	78.8	88.9	70.3	20.8	30.2	16.3	—	21	92½	17.3	36.8	24.8	May
7	64	65	61.4	92.9	98.0	80.3	28.9	23.0	18.9	—	85	82½	18.2	18.7	34	June
0	67	70	67.7	89.1	101.5	88.7	22.1	31.5	21.0	—	66	107½	42.2	19.7	41.9	July
4	64	65	66.8	76.7	88.6	88.5	12.7	23.6	21.7	—	43	133	47.5	56.1	30.1	Aug.
6	60	55.9	61.3	69	68.9	70.9	9	13	9.6	—	30	94	45.5	49.2	48.1	Sept.
0	53	54	48.8	57.9	59.7	52.9	4.9	5.7	4.1	—	39	46	29.6	49.2	49.9	Oct.
0	46	42	44	46.8	44.5	44.8	2.8	2.6	.8	—	16	6	23.3	17.7	24.3	Nov.
0	45	38	41.2	45.4	39.1	42.4	.4	1.1	1.2	—	12½	10½	39.5	42.9	33.1	Dec.

Table shewing Condition of Patients discharged from the Derbyshire Sanatorium from 1915-1925, inclusive.
Actual Figures and Percentages.

Condition in 1926.	1915-1917.		1918.		1919.		1920.		1921.		1922.		1923.		1924.		1925.		Total.	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Improved ...	196	36.50	65	31.40	74	26.24	99	38.08	92	36.50	89	32.01	96	34.04	127	39.80	145	39.40	983	35.30
Stationary ...	66	12.29	29	14.01	40	14.20	53	20.39	36	14.30	32	11.51	45	15.96	67	21.00	72	19.57	440	15.80
Worse ...	11	2.05	2	.97	3	1.06	8	3.08	6	2.38	9	3.24	12	4.26	21	6.59	26	7.06	98	3.52
Dead ...	116	21.60	62	29.95	106	37.59	74	28.46	86	34.13	112	40.29	102	36.17	82	25.71	88	23.91	828	29.73
Untraced & gone away	133	24.77	44	21.26	54	19.14	25	9.61	24	9.52	34	12.23	24	8.51	19	5.96	37	10.06	394	14.15
Discharged Not T.B. ...	15	2.79	5	2.41	5	1.77	1	.38	8	3.17	2	.72	3	1.06	3	.94	—	—	42	1.50
Total ...	537	100.00	207	100.00	282	100.00	260	100.00	252	100.00	278	100.00	282	100.00	319	100.00	368	100.00	2785	100.00

TABLE T. I.

PENMORE PAVILION FOR ADVANCED MALES—

Admissions and Discharges of patients during the year 1926—				
<i>Ex-service</i>				
<i>Men. Others. Total.</i>				
Patients in the Institution on				
January 1st, 1926	...	3	10	13
Admissions	... ..	5	24	29
Discharges	... ..	6	25	31
Patients remaining in the Institution on December 31st, 1926				
		2	9	11

BRETBY HALL ORTHOPAEDIC HOSPITAL.

This institution was opened on April 14th, 1926 for the reception of 50 cases of bone and joint tuberculosis in children.

In the Survey Report for 1925, I described the Bretby Hall Estate which was purchased by the County Council in 1919, at a cost of £21,500. The estate comprises 459 acres of woodland park land and gardens, and 7 acres of lakes, and is situated between Swadlincote and Repton in one of the most beautiful parts of the County.

The general strike and coal stoppage in 1926 delayed the admission of patients till May 31st, when the first patients were admitted. From that time until the end of December 1926, 73 patients have been admitted and 18 discharged from this institution. The average number of beds occupied during the same period was 51 and the average length of stay of the 18 patients discharged was 84 days. The following are the locations of the Tubercular lesions treated and the results of the treatment :—

<i>Disease.</i>				<i>Result of Treatment.</i>
Abdominal	...	...	...	1 improved.
Cervical Glands	...	...	...	3 improved, 2 quiescent.
Skin	...	...	...	1 improved, 1 unimproved.
Lymphatic Glands	...	...	...	2 improved
Bone and Joint—Knee	...	...	...	1 improved, 1 quiescent.
Do.	Elbow	...	...	1 improved.
Do.	Hip	...	...	2 quiescent, 3 improved but to return for further treatment.

During the year, the Education Committee and the Maternity and Child Welfare Committee decided to enter into an agreement with the Tuberculosis Committee for the reception of 50 children suffering from crippling defects of non-tubercular origin, and a scheme is in course of preparation for the accommodation of these children at Bretby. It was decided that such accommodation should be provided by means of an up-to-date open-air block, built in close proximity to the main building. This

will meet a long felt want in the County, as hitherto non-tubercular cases requiring orthopædic treatment have been sent to various institutions outside the County.

The After-care Clinics already established at Alfreton, Belper, Chesterfield, Derby, Long Eaton and Swadlinecote, will be further developed for the after-care of patients from Bretby, and it is hoped to arrange for the regular attendance of a surgeon and an orthopædic nurse at each of the Clinics.

One difficulty in a County like Derbyshire is the conveyance of children to and from the Clinics. The number of clinics must of necessity be limited, and for the convenience of the majority, they must be situated in the more populous districts. An ambulance service for the conveyance of children from the villages to the after-care clinics is expensive and difficult to provide, and it is suggested to those people living in the villages who are fortunate enough to be in possession of motor cars and leisure, that they would be doing a great service if they would undertake to convey cripples from their area to and from the nearest clinic. Rarely would there be more than one such child in a village, whilst there would be possibly two or three people in a position to undertake alternatively the conveyance of the child.

TABLE T. II

TUBERCULOSIS NOTIFICATIONS (FORM A)													
Age Periods	NUMBER OF PRIMARY NOTIFICATIONS											Total Notifica- tions on Form A	
	0—1	1—5	5—10	10—15	15—20	20—25	25—35	35—45	45—55	55—65	65 and upwards		Total Primary Notifi- cations,
Pulmonary—													
Males ...	1	12	33	28	24	33	75	44	34	20	5	309	328
Females ...	—	3	22	21	47	47	62	45	24	10	4	285	307
Non-Pulmonary—													
Males ...	8	33	47	31	8	11	9	5	3	2	1	158	164
Females ...	2	37	34	18	14	10	11	4	4	1	—	135	139
TOTALS ...	11	85	136	98	93	101	157	98	65	33	10	887	938

Outside Institutions.—The County Council have no institution for the treatment of non-pulmonary tuberculosis in adults, and such cases are sent to institutions outside the County. During 1926 the Council have undertaken financial responsibility for cases at the following institutions :—

Lord Mayor Treloar's Home, Alton.
 Shropshire Orthopædic Hospital, Oswestry.
 Cambridgeshire Tuberculosis Colony, Papworth.
 Wingfield Orthopædic Hospital, Oxford.
 St. Gerard's Hospital, Coleshill.
 King Edward VII. Hospital, Midhurst.
 Dartmoor Sanatorium, Chagford, Devon.
 Pendlebury Childrens' Hospital.
 Stockport Infirmary.

The following Table shows the number of such cases treated during 1925 :—

TABLE T. III.

Patients Treated in Outside Institutions.

Admissions and discharges of patients during the year 1926 :—

		<i>Males.</i>		<i>Females.</i>	<i>Total.</i>
		<i>Ex-Service</i>	<i>Others.</i>		
		<i>Men.</i>			
Patients in Institutions on					
January 1st, 1926	...	3	10	7	20
Admissions	...	3	5	2	10
Discharges	...	2	12	8	22
Patients remaining in Insti-					
tutions on December					
31st, 1926	...	4	3	1	8

TABLE T. IV.

(A) Average Number of Beds available for Patients during the Year 1926.

		Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total.
			"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones & Joints.	Other Conditions.	
Adult Males	...	3	37	42	5	—	87
Adult Females	...	3	37	—	2	—	42
Children under 16	...	7	13	—	63	—	83
Total	...	13	87	42	70	—	212

TABLE T. V.

(B) Return showing the Extent of Residential Treatment
during the year 1926.

		In Insti- tutions. Jan. 1st.	Admitted during the year.	Dis- charged during the year.	Died in the Insti- tutions.	In Insti- tutions on Dec. 31st, 1926.
Number of Patients.	Adults M.	67	166	162	13	58
	„ F.	33	109	97	5	40
	Children M.	26	89	64	—	51
	„ F.	21	61	56	—	26
Number of Observation Cases.	Adults M.	1	14	13	1	1
	„ F.	3	3	6	—	—
	Children M.	3	10	13	—	—
	„ F.	—	2	2	—	—
	Total ...	154	454	413	19	176

TABLE T. VI.

Return showing the immediate results of treatment of patients and of observation of doubtful cases discharged from Residential Institutions during the year 1926.

		Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTAL.
			Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
I.B. minus.	Quiescent ... ..	...	1	—	3	—	—	3	—	—	—	—	—	—	7
	Improved ... ..	...	17	16	16	5	5	15	2	1	6	—	—	—	83
	No material improvement	...	5	2	—	1	—	—	—	—	—	—	—	—	8
	Died in Institution	...	1	—	—	—	—	—	—	—	—	—	—	—	1
plus. Group 1.	Quiescent ... ..	...	—	—	—	1	—	1	—	—	—	—	—	—	3
	Improved ... ..	...	14	3	7	14	5	9	2	—	3	—	—	1	57
	No material improvement	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution	...	—	—	—	—	—	—	—	—	—	—	—	—	—
plus. Group 2.	Quiescent ... ..	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved ... ..	...	21	17	2	24	18	10	5	4	2	2	—	—	105
	No material improvement	...	1	3	—	4	1	—	—	—	1	—	—	—	10
	Died in Institution	...	1	—	—	—	—	—	—	—	—	—	—	—	1
plus. Group 3.	Quiescent ... ..	...	2	—	—	—	—	—	—	—	—	2	—	—	4
	Improved ... ..	...	8	4	—	8	7	—	2	3	1	1	—	—	34
	No material improvement	...	4	5	2	6	—	—	4	2	—	2	—	—	25
	Died in Institution	...	6	3	—	4	—	—	—	2	—	1	—	—	16
Joints.	Quiescent or Arrested	...	—	—	—	—	—	3	—	—	2	—	1	2	8
	Improved ... ..	...	—	—	3	—	—	5	1	—	2	1	—	7	19
	No material Improvement	...	2	—	—	1	—	—	—	—	—	—	—	1	4
	Died in Institution	...	—	—	—	—	—	—	—	—	—	—	—	—	—
Intest.	Quiescent or Arrested	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved ... ..	...	—	—	—	—	—	1	—	—	—	—	—	—	1
	No material improvement	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution	...	—	—	—	—	—	—	—	—	—	—	—	—	—
Genit. Organs.	Quiescent or Arrested	...	—	—	—	—	—	1	—	—	—	—	—	—	1
	Improved ... ..	...	—	—	4	—	—	1	—	—	—	—	—	—	5
	No material improvement	...	—	—	1	—	—	—	—	—	—	—	—	—	1
	Died in Institution	...	—	—	—	—	—	—	—	—	—	—	—	—	—
Thyroid Glands.	Quiescent or Arrested	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved ... ..	...	—	—	1	—	—	2	—	—	1	—	—	—	4
	No material improvement	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution.	...	—	—	—	—	—	—	—	—	—	—	—	—	—
			Under 1 week.			1—2 weeks.			2—4 weeks.			More than 4 weeks.			
purpose of diagnosis.	Tuberculous ... ..	...	—	—	1	—	—	—	2	—	—	7	7	11	28
	Non-tuberculous ... ..	...	—	—	—	—	—	—	—	—	—	3	—	2	5
	Doubtful ... ..	...	1	—	—	—	—	—	—	—	—	—	—	1*	2

*Died.

Dispensaries.—The Dispensary unit of the scheme comprises 9 Dispensaries as set out on page 23.

Other Services.—Arrangements for domiciliary visiting, nursing of bed-ridden cases, granting of extra nourishment, the after-care of tuberculous patients and the provision of shelters have undergone no change since 1925, and are as described on pages 88—89 of the Survey Report of that year.

No arrangements have been made for the provision of dental treatment for tuberculous patients attending the Dispensaries, and in this connection Circular 771 of the Ministry of Health issued on March 31st, 1927, states that tuberculous patients over 21 years of age should generally be referred to their Approved Societies, under which arrangement it is estimated that 75 per cent of the insured persons in England will be in a position to obtain this treatment.

The work done under the above services is tabulated below :—

Homes visited by Health Visitors	...	...	...	10,620
Number of Bed-ridden Cases nursed	...	...	...	20

Extra Nourishment :—

No. of patients to whom milk was granted	...	...	...	64
Cost	...	...	...	£113

Shelters :—

No. sold during 1926	...	...	...	2
No. in use at end of 1926	...	...	...	113
No. in store at end of 1926	...	...	...	21
Sets of beds and bedding supplied	...	...	...	37
Shelters supplied but not in use	...	...	...	27
Shelters damaged beyond repair	...	...	...	4

X-Rays.—The following Table shows the number of patients who were submitted to X-Rays, in the various Dispensary areas :—

<i>Dispensary Area.</i>	<i>No. of patients.</i>
Ashbourne	12
Burton	82
Chesterfield	335
Chinley	23
Derby	332
Glossop	3
Ilkeston	26
Long Eaton	46
Matlock	63
	922
Walton Sanatorium	570
Bretby Hall Orthopædic Hospital	123
	1,615

BACTERIOLOGICAL WORK

Examination of Sputa.—The following Table shows the number of examinations of sputa for tubercle bacilli made in the County Laboratory during the year :—

TABLE T. VII.

			<i>Pos.</i>	<i>Neg.</i>	<i>Total</i>
From Medical Practitioners	...		161	1178	1339
From Dispensaries and Sanatoria			217	823	1040
From Hospitals	...	...	—	—	—
Total	...	...	378	2001	2379

TABLE T. VIII.

Specimens of sputum examined by the Ellerman and Erlandsen method during the year ending December 31st, 1926.

Up to 10 years		11—20		21 & over		Totals.	
<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>
2	236	46	329	24	545	72	1110

Ministry of Pensions.—The work done for the Ministry of Pensions during 1926 was as follows :—

<i>Certificates.</i>	<i>Number completed.</i>
M.P.M.S.D. 81 ...	395
M.P.M.S.D. 31 ...	7
M.P.A. 36 T.O. ...	23
Total ...	425

REFRACTORIES INDUSTRIES (SILICOSIS) SCHEME 1919 & 1925.

During the year 1926, 15 of these workers were examined by the Tuberculosis Officers.

In this connection I would refer the reader to an Article which is appended to this Report, by Dr. P. Heffernan, one of the Council's Tuberculosis Officers.

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

It has not been found necessary to take prohibitive action under these Regulations during 1926, but one case of a tubercular patient, reported as being engaged in an occupation involving the handling

of milk was investigated. The investigation however showed that he did not handle milk or otherwise occupy himself under such conditions as to create danger of infection to milk.

PUBLIC HEALTH ACT, 1925 (Section 62)

One case of a person suffering from pulmonary tuberculosis in an infectious state, and constituting a source of risk to other persons, on refusing institutional treatment, was acquainted with the provision of this section and finally accepted treatment.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1924.

From the Quarterly Summaries returned from District Medical Officers of Health in accordance with these Regulations, the following table has been compiled, showing the number of cases of all forms of tuberculosis remaining on their registers on December 31st, 1926 :—

PULMONARY.			NON-PULMONARY.			TOTAL
Males.	Females.	Total.	Males.	Females.	Total.	
1447	1164	2611	542	473	1015	3626

I wish to draw attention to the large number of cases of tuberculosis who die without being notified, as shewn in Table T. IX. One out of every four such cases are not notified. This is a very serious breach of the Tuberculosis Regulations of 1912 and 1921, and it is a duty placed upon the medical attendant. The neglect to notify has been commented on before in this County and in other areas. The seriousness with which the Ministry of Health regards this matter is shown in paragraph 5 of their Circular 549, referring to the Public Health (Tuberculosis) Regulations, 1912 and 1921, issued in December, 1924 in which the Ministry state :—

“ The Ministry desires to take this opportunity of impressing upon Local Authorities the responsibility which attaches to them, for seeing that the requirements of the Regulations are fully observed in their Districts, and I am to state that where (as in the case of a death certified as due to tuberculosis of a person who had not previously been notified under the Regulations) there is *prima facie* evidence of neglect to notify on the part of the medical attendant, immediate steps should be taken by the Local Authority to obtain an explanation from the medical attendant as to the circumstances under which formal notification under the Regulations was not made. If the explanation is not satisfactory, it should be borne in mind that the Local Authority have power to institute proceedings for the recovery of a penalty under Section 1 (3) of the Public

TABLE T. X.

REPORT SHOWING THE WORK OF THE TUBERCULOSIS DISPENSARIES during the Year 1926.

DISPENSARIES.	ASH- BOURNE.	BURTON.	CHESTER- FIELD.	CHINLEY.	DERBY.	GLOSSOP.	ILKESTON	LONG EATON.	MATLOCK.	WHOLE COUNTY.
A. Estimated Population, 1926 ...	14,880	35,030	267,010	45,680	99,940	25,530	64,890	29,870	32,970	615,800
Notifications 1926—										
Pulmonary	10	37	241	55	118	24	49	25	35	594
Non-Pulmonary	12	18	117	37	34	20	23	5	27	293
Total	22	55	358	92	152	44	72	30	62	887
B. NEW CASES— (Total) ...	27	91	432	123	292	72	118	70	117	1342
(a) Definitely Tuberculous										
i. Pulmonary	14	25	135	47	72	23	44	30	25	415
ii. Non-Pulmonary	2	5	68	21	16	15	14	1	20	162
(b) Doubtfully Tuberculous	3	45	20	1	146	...	11	6	8	240
(c) Non-Tuberculous	8	16	209	54	58	34	49	33	64	525
C. CONTACTS— (Total) ...	12	17	310	87	174	30	118	12	40	800
(a) Definitely Tuberculous:										
i. Pulmonary	2	1	9	8	5	5	...	...	3	33
ii. Non-Pulmonary	1	...	3	8	...	1	...	...	1	14
(b) Doubtfully Tuberculous ... ..	...	2	20	2	91	...	18	...	5	138
(c) Non-Tuberculous	9	14	278	69	78	24	100	12	31	615
D. CASES WRITTEN OFF DISPENSARY REGISTER. (Total) ...	21	52	550	145	495	62	240	10	121	1696
(a) Cured.										
i. Pulmonary	2	...	45	11	68	...	25	1	20	172
ii. Non-Pulmonary ... ..	...	...	8	8	3	...	15	...	3	37
(b) Diagnosis not confirmed or Non-Tuberculous	19	52	497	126	424	62	200	9	98	1497
E. NUMBER ON REGISTERS ON DECEMBER 31st, 1926 (Total) ...	86	150	746	257	429	174	202	138	250	2432
(a) Diagnosis completed.										
i. Pulmonary	71	92	600	177	329	119	148	119	193	1848
ii. Non-Pulmonary	12	12	134	77	48	55	52	18	56	464
(b) Diagnosis not completed	3	46	12	3	52	...	2	1	1	120
1. Number on Register Jan. 1st, 1926	72	117	671	219	489	150	254	93	234	2299
2. No. of transferred and "lost-sight-of"										
Cases returned	1	...	6	7	9	...	2	4	2	31
3. No. transferred, and lost sight of ...	2	10	57	14	21	7	17	5	7	140
4. No. died during year	3	13	66	20	19	9	33	26	15	204
5. Cases under observation for more than 2 months	1	34	12	...	141	...	15	7	5	215
6. Total Attendances	149	454	2415	619	1690	669	824	558	703	8081
7. Attendances at Orthopædic Clinics	...	...	...	...	...	...	...	...	...	287
8. Consultations with Medical Prac- titioners:—										
(a) At homes	3	3	56	26	5	9	9	...	7	118
(b) Otherwise ... ..	...	32	331	2	110	7	67	9	8	566
9. Other visits by T.O.'s to Patients' Homes.	8	16	300	88	59	30	42	49	34	626
10. Number of:—										
(a) Sputum Examinations	31	71	216	126	234	102	60	76	83	999
(b) X-ray Examinations	12	82	335	23	332	3	26	46	63	922
11. Insured Persons on Register on Dec. 31st, 1926	36	78	366	85	165	97	98	62	105	192
12. Insured Persons under Domiciliary Treatment Dec. 31st, 1926	5	6	38	32	18	26	20	3	12	160
13. Reports received in respect of Insured Persons:—										
(a) Form G.P. 17 ... ..	...	...	14	...	1	...	2	...	...	17
(b) Form G.P. 36	9	10	50	17	7	4	7	2	9	115

Health Act, 1896, in cases of wilful neglect or refusal to carry out the Regulations: and it appears to the Minister that it may even be desirable to proceed to a prosecution in one or two cases of the kind where the circumstances warrant such action in order to secure the objects of the Regulations."

In March, 1918, Dr. Barwise, reporting on this same subject, pointed out that 70 per cent of the 412 deaths reported in 1917 were either not notified or notification was only made within 12 weeks of the date of death. There appears to be some improvement since that time, for of the 357 deaths in 1926, 55 per cent were either not notified or died within 12 weeks of notification.

I would again ask all those concerned with this matter of notification, to do their utmost to see that all cases of Tuberculosis are notified at the earliest possible moment. If, in the case of a patient who has attended more than one doctor, the second doctor is in any doubt as to whether the case has been notified, he should notify it. It is far better that a case should be notified twice than that it should be missed altogether, and in the former event rectification is very simple. I would take this opportunity of pointing out that tuberculosis of the bones, joints, glands or any other organ, in fact tuberculosis in any of its forms, is now notifiable.

Deaths from Tuberculosis.—The following Table shows the periods between the date of notification and the date of death:—

TABLE T. IX.

					Per cent.
Cases not notified	...	...	...	90	25·1
Notified after death	...	...	...	22	6·1
Notified 1 week before death	...	...	...	19	5·3
2 weeks before death	...	...	...	11	3·1
3 weeks before death	...	...	...	7	1·9
4 weeks before death	...	...	...	5	1·4
1—2 months before death	...	...	...	26	7·3
2—3	"	"	"	16	4·5
3—4	"	"	"	12	
4—5	"	"	"	13	
5—6	"	"	"	7	
6—7	"	"	"	6	
7—8	"	"	"	5	
8—9	"	"	"	9	
9—10	"	"	"	8	
10—11	"	"	"	7	
11—12	"	"	"	4	
Over 1 year	...	...	...	91	
				358	

VENEREAL DISEASES.

Details of the arrangements for the treatment of Derbyshire patients suffering from these diseases were given in the Survey Report for 1925 (page 105).

The Tables which follow show the extent to which the scheme is utilised.

The number of new cases attending the Venereal Diseases Centres during the year 1926, and the diseases for which they required treatment are as follows :—

TABLE XXXI.

<i>Disease.</i>	<i>Chester- field.</i>	<i>Derby.</i>	<i>Notting- ham.</i>	<i>Stock- port.</i>	<i>Total.</i>
Syphilis	70	46	35	2	153
Gonorrhœa	133	92	56	9	290
Soft Chancre	71	48	29	2	150
Total	274	186	120	13	593

The details of the cost of the scheme are as follows :—

TABLE XXXII.

<i>Treatment—</i>	£
Out-Patients	2726
In-Patients	518
Salvarsan Substitutes, Drugs, etc.	588
Travelling Expenses—Doctor	35
" Patients	69
<i>Other Services—</i>	
Pathological Examinations	570
Gross cost	4506
Receipts for Pathological work done for other	
Authorities	289
Nett cost	£4217

The cost per attendance, including both in-patients and out-patients at Chesterfield, Derby and Nottingham worked out as follows :—

	s.	d.
Chesterfield	2	8
Derby	4	5
Nottingham	3	4

The General Practitioners submitted 1,480 specimens, details of which are as follows :—

TABLE XXXIII.

		<i>Spirochaetes.</i>		<i>Wassermanns</i>		<i>Gonococci.</i>	
		<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>
Derbyshire	}...	—	1	264	1022	55	138
Derby Borough							
Burton-on-Trent							

During 1926 the number of specimens submitted by the General Practitioners was 1,480, whilst in 1925, 1924, 1923 and 1922, the numbers of specimens submitted were respectively 1,174, 1,013 932, and 665.

Thirteen medical practitioners possessing the necessary qualification and experience, received free supplies of salvarsan and salvarsan substitutes for use within the County. These drugs are kept at the Central Office and issued as required. During the year 1926 a total of 125 doses were supplied as follows :—

<i>Dose.</i>	<i>Kharsulphan.</i>	<i>N.A.B.</i>	<i>Stabilarsan.</i>
0.15	6	—	—
0.3	6	18	4
0.45	6	29	2
0.6	6	40	2
0.75	—	2	2
0.9	—	2	—
	24	91	10

PUBLIC HEALTH ACT, 1925.

BLIND PERSONS ACT COMMITTEE.

Section 66 (1) of this Act empowers the County Council, with the consent of the Minister of Health, to make such arrangements as they may think desirable for assisting in the prevention of blindness, and in particular for the treatment of persons ordinarily resident within their area suffering from any diseases of, or injury to, the eye.

In this County the powers under this Section were delegated to the Blind Persons Act Committee, and at the request of that Committee, a scheme was drawn up under which they would pay the travelling expenses of adult necessitous cases requiring treatment for disease of, or injury to the eye likely to cause blindness. Such expenses would only be paid in cases where the net income of the family is less than 40s. per week after deducting

(a) 5s. per week for each child under 14 years,

(b) 15s. per week for each person contributing to the income as the cost of his maintenance.

Any persons requiring the help of the Committee in this direction should apply to J. J. Jelf, Esq., Offcote House, Ashbourne, Derbyshire. Fares are not paid for patients under 16 years of age.

MENTAL DEFICIENCY ACT, 1913.

TABLE XXXIV.

<i>No. of Cases.</i>	<i>Males.</i>	<i>Females</i>	<i>Total.</i>
In Institutions, under " Order "	31	52	83
Do. under " Per- missive "	—	5	5
Under Guardianship	—	2	2
Under Statutory Supervision ...	15	21	36
Transferred from Education Committee	9	7	16
Under consideration	605 .	560	1165

DERBYSHIRE EDUCATION COMMITTEE.

REPORT

OF THE

School Medical Officer

ON THE

Medical Inspection of School Children

FOR THE

Year ended 31st December, 1926.

W. M. ASH, M.B., B.S., F.R.C.S., D.P.H.

School Medical Officer.

SCHOOL MEDICAL STAFF.

COUNTY SCHOOL MEDICAL OFFICER—

W. M. ASH, M.B., B.S., F.R.C.S. D.P.H.

CHIEF ASSISTANT SCHOOL MEDICAL OFFICER—

I. C. MACKAY, M.B., Ch.B., D.P.H.

ASSISTANT SCHOOL MEDICAL OFFICERS—

F. J. BURKE, M.B., B.Ch.

M. S. W. GUNNING, L.R.C.P., L.R.C.S.

WILHELMINA W. HENDRY, M.B., Ch.B., D.P.H.

H. S. BRYAN, M.R.C.S., L.R.C.P.

J. E. HAINE, M.B., Ch.B., D.P.H.

Also 14 Part-time School Medical Officers detailed in Table A.

OPHTHALMIC SURGEON—

T. E. A. CARR, M.B., B.S.

EAR, NOSE AND THROAT SURGEON—

MARGARET S. PURCE, M.B., B.Ch., F.R.C.S.

DENTISTS—

G. L. ELMITT, L.D.S.

DOROTHY A. LITTLAR, L.D.S.

JOSEPHINE DOLAN.

and Three Dental Attendants.

SUPERINTENDENT SCHOOL NURSE—

Miss N. WILLATT.

Also 53 School Nurses.

ORTHOPÆDIC NURSE—

Miss M. E. GARRATT.

TABLE A.

District	Name of Doctor.	No. of Schools in Area.	No. of Routine Children In-spected	No. of "Special" Children In-spected.	No. of Children Re-ex-aminated at School.	Enrol-ment.	Per-centage of Enrol-ment In-spected	No. of Notices sent for Ear and Throat Con-ditions.	No. of Notices sent for Eye Con-ditions.	No. of Notices sent for other Con-ditions.	Per'c'te of Chil-dren In-spected notified for Treatm't
URBAN DISTRICTS.											
Alfreton	Dr. <i>Burke</i>	10	1290	258	...	3944	39.2	201	96	171	30.1
Alvaston & Boulton ...	„ <i>Hendry</i>	2	191	6	60	338	76.0	62	15	3	31.1
Ashbourne	„ <i>Sadler</i>	2	242	6	...	633	39.1	118	17	1	54.8
Bakewell	„ <i>Evans</i>	2	129	2	...	355	36.9	6	10	9	19.1
Baslow	„ <i>Bryan</i>	1	53	8	...	93	65.6	2	1	2	8.2
Belper	„ <i>Haine</i>	5	537	52	159	1969	38.0	63	30	18	14.8
Bolsover	„ <i>Gunning</i>	8	1445	50	...	3106	48.1	124	104	...	15.2
Bonsall	„ <i>Harvey</i>	2	53	—	...	197	26.9	...	1	3	26.9
Brampton & Walton ...	„ <i>McCrea</i>	4	196	11	...	369	56.1	4	14	25	20.7
Clay Cross	„ <i>Burke</i>	2	698	187	...	1662	50.8	87	65	70	25.1
Dronfield	„ <i>Gunning</i>	1	326	6	...	750	44.2	8	14	...	6.6
Heage	„ <i>Haine</i>	4	203	36	20	739	35.0	13	7	4	9.2
Heanor	„ <i>Turton</i>	13	1191	8	...	3910	30.6	58	54	72	15.3
Long Eaton	„ <i>Hendry</i>	6	1140	13	437	3164	50.2	320	124	83	33.1
Matlock	„ <i>Bryan</i>	7	198	26	5	1153	19.9	4	8	18	13.1
New Mills	„ <i>Pemberton</i>	6	408	13	22	1092	40.6	24	39	18	18.3
North Darley	„ <i>Bryan</i>	2	Not	Examined	...	386	...	...	...	...	...
Ripley	„ <i>Haine</i>	4	780	58	59	2083	43.1	99	65	45	23.3
South Darley	„ <i>Bryan</i>	1	31	6	...	71	52.1	2	...	3	13.5
Swadlincote	„ <i>Logan</i>	8	1358	11	...	3616	37.8	72	54	17	10.4
Wirksworth	„ <i>Haine</i>	3	155	42	...	497	39.6	31	11	8	25.3
Urban Districts ...	Total	93	10624	799	762	30127	40.4	1298	729	570	21.3
RURAL DISTRICTS.											
Ashbourne	Dr. <i>Hollick</i>	22	438	99	...	1379	38.9	46	24	7	7.1
Bakewell	„ <i>Bryan</i>	34	1028	45	...	2689	39.9	26	58	25	10.1
Basford	„ <i>Haine</i>	1	49	1	16	203	32.5	8	2	15	37.8
Belper	„ <i>Haine</i>	34	1333	248	169	3636	48.1	162	76	82	18.3
Blackwell	„ <i>Wear</i>	26	2959	112	...	8549	35.9	146	131	1	9.05
Chapel-en-le-Frith ...	„ <i>Bryan</i>	22	717	18	332	2110	50.5	122	68	28	20.4
Chesterfield	„ <i>Gunning</i>	26	2734	194	...	7330	39.9	262	199	2	15.8
	„ <i>Burke</i>	27	2635	612	...	6915	46.9	454	197	332	30.3
Clowne	„ <i>Gunning</i>	8	970	49	...	3241	31.4	65	62	1	12.5
Glossop	„ <i>Milligan</i>	5	133	6	23	370	43.7	3	6	4	8.02
Hartshorne & Seals ...	„ <i>Logan</i>	8	479	38	8	1768	29.7	32	10	9	9.7
Hayfield	„ <i>Bryan</i>	3	45	7	9	407	14.9	3	3	1	11.5
Norton	„ <i>Gunning</i>	5	215	7	...	625	35.5	14	8	...	9.9
Repton	„ <i>Moir</i>	6	362	13	...	949	39.5	29	12	1	11.2
	„ <i>Holmes</i>	17	452	14	6	1325	35.4	55	14	2	15.0
Shardlow	„ <i>Hunt</i>	31	1746	69	120	4997	38.7	146	61	23	12.5
Sudbury	„ <i>Herbert</i>	6	129	11	...	416	33.6	6	1	...	5.00
Rural Districts ...	Total	281	16424	1543	683	46641	39.9	1579	932	533	16.3
TOTAL WHOLE TIME OFFICERS		242	19732	2041	1226	55392	41.5	2278	1344	912	19.7
TOTAL PART TIME OFFICERS		132	7316	301	179	21376	36.4	599	317	191	14.2
WHOLE TIME AND PART TIME OFFICERS		374	27048	2342	1445	76768	40.1	2877	1661	1103	18.3

Doctors in Italics are not engaged in private practice.

SECTION I.

NUMBER OF SCHOOLS AND ENROLMENTS.

Of the 40 Sanitary Districts in the Administrative County of Derby, 36 are in the County Elementary Education area, 21 being Urban Districts and 15 Rural Districts.

Table A of this Report shows the number of schools and enrolment in each district, together with details of the inspections made.

Four new schools have been completed during the year.

CO-ORDINATION.

The closest co-operation is maintained between the School Medical, Maternity and Child Welfare, and Tuberculosis Services, the Medical Officers in the various departments being in constant touch with each other. There has been no material alteration in the working of the scheme from previous years, a full account of this having been given on page 7 of the report for 1925.

THE SCHOOL MEDICAL SERVICE IN RELATION TO PUBLIC ELEMENTARY SCHOOLS.

School Hygiene.

During the year the Assistant School Medical Officers returned 92 reports, details of which are given below in Table B.

TABLE B.

	Good,	Insufficient,	Defective or needs repair.
Cleanliness	84	6	3
Heating	79	9	3
Lighting	70	18	3
Ventilation	69	8	7
Water Supply	73	3	9
Washing Arrangements	69	17	4
Cloak Room Arrangements	71	7	3
Sanitary Arrangements	73	6	14
Playground	62	—	31

The defects were reported to the School Architect, who reports the work done in this connection during the year as follows :—

Four new schools have been completed.

<i>No. of Schools.</i>	<i>Type of Work.</i>
8	Improvements to heating apparatus.
5	Heating improved by stoves or fireplaces.
2	Conveniences converted.
10	Drainage improved.
6	Ventilation improved.
7	Electric light has been supplied.
5	New floors put in.
1	Has been supplied with Cookery Centre.
2	Have been supplied with Manual Rooms.
210	Have had general repairs.

Medical Inspection. The scheme for Medical Inspection remains unaltered from that of 1925, a detailed account of which was given in the report for that year.

(a) *The Age Groups* examined during the year (see Table 1 at the end of this Report) were :—

Routine	I. Entrants—or children commencing school.
	II. Children between the ages of 8 and 9 years.
	III. Leavers—children between the ages of 12 and 14 years.
	IV. Specials.
	V. Re-examinations.

(b) *Extent to which the Board's Schedule of Medical Inspection has been followed.* In the report of 1925 the inadequacy of the staff was commented upon. Towards the end of this year two full-time Assistant School Medical Officers were appointed, and as a result there has already been an appreciable difference in the number of children inspected, as shown by the comparative Table below.

	Inter-					
	Entrants	mediates	Leavers	Specials	Re-exam.	Total.
1925	9,910	7,447	6,931	2,900	914	28,102
1926	10,167	7,800	9,081	2,342	1,445	30,935

FINDINGS OF MEDICAL INSPECTIONS AND MEDICAL TREATMENT.

Appended to this Report will be found the Tables prescribed by the Board of Education showing defects found during 1926 (Table IIA), number of children found to require treatment (Table IIB), whilst Group IV. of Table IV. shows the dental defects found and Group V. of Table IV. relates to uncleanliness and verminous conditions.

(a) *Uncleanliness.* Inspections were made at varying intervals by the School Nurses with a view to examining the children for verminous conditions. During the year 178,619 inspections were made, an increase of 20,552 as compared with last year. The following Table shows the figures relating to the whole County.

TABLE C.

Year.	No. Inspected.		No. found Verminous.		Percentage Verminous.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1919	49,028	79,728	854	16,672	1.74	20.90
1920	49,098	77,267	891	14,905	1.81	19.28
1921	57,846	101,199	1,119	18,901	1.93	18.68
1922	53,352	77,021	1,077	13,845	1.90	17.90
1923	63,575	99,719	1,450	19,492	2.20	19.40
1924	61,167	96,925	1,197	16,837	1.90	17.30
1925	64,478	91,121	1,446	15,117	2.15	16.50
1926	76,772	101,847	2,195	15,429	2.87	15.26

Again there is no improvement to be noted amongst the boys, in fact there is an increase in the percentage. It is satisfactory to note that verminous conditions among the girls is steadily decreasing, but not so rapidly as might have been expected with the advent of bobbed hair.

(b) *Minor Ailments.* Detailed returns of the incidence of cases found are set out under their respective headings in Table II. Excellent work continues to be carried out at the various clinics in the County. Table IV, Group I, shows a total of 5,110 minor ailments treated, 4,490 being treated under the Authority's scheme and 620 otherwise.

The following clinics are provided for the treatment of Minor Ailments :—

Minor Ailments Clinic.			Attended by M.O. & Nurse.	Attended by Nurse only.
Alfreton	...	...	1st & 3rd Tuesdays (a.m.)	—
Belper	...	...	Thursdays (a.m.)	Daily
Long Eaton	...	...	Fridays (a.m.)	Daily.
Ripley	...	...	—	Tuesday (p.m.)
Shirebrook	...	...	Wednesday (p.m.)	Daily.
Swadlincote	...	...	—	Monday (p.m.)

(c) *Tonsils and Adenoids.* Of the children examined during the year a total of 8,150, or 25%, were found to have enlarged tonsils or adenoids or both. Of this number 2,945 required treatment, and of these 1,476 were treated under the County Scheme, a survey of which was given in the report for 1925.

School Clinics for the examination and treatment of diseases of the Ear, Nose and Throat are established at the following centres :—

<i>Clinic.</i>	<i>Days Open.</i>	<i>Operation.</i>	<i>Examination.</i>
Alfreton	As required	—	Examination only
Ashbourne	do.	Operation	and Examination
Belper	do.	—	Examination only
Clay Cross	do.	—	Examination only
Clown	do.	—	Examination only
Chesterfield	Tuesdays, except 1st in month	Operation	and Examination
Chinley	1st Tuesday	Operation	and Examination
Derby	Every Wednesday	Operation	and Examination
Long Eaton	As required	—	Examination only
Matlock	do.	—	Examination only
Ripley	do.	—	Examination only
Shirebrook	do.	Operation	and Examination
Swadlincote	do.	—	Examination only

(d) *Tuberculosis.* Of the 30,835 children examined by the Assistant School Medical Officers during the year, the following were returned as suffering from various forms of tuberculosis :—

PULMONARY.

Definite	...	...	...	...	49	(Last year 41)
Suspected	...	...	...	...	57	„ 54

NON-PULMONARY

Glands	...	...	...	...	30	„ 21
Spine	...	...	...	...	—	„ 5
Hip	...	...	...	...	12	„ 8
Other Bones and Joints	...	...	...	...	10	„ 4
Skin	...	...	...	...	3	„ 3
Other forms	...	...	...	...	2	„ 2

All cases of tuberculosis or suspected tuberculosis are referred to the Tuberculosis Dispensaries for further observation or such treatment as is deemed necessary.

(e) *Skin Diseases.*

Ringworm of the Scalp. During the year 497 children were found to be suffering from this disease, 485 being treated under the Authority's scheme and 12 otherwise. The procedure adopted for diagnosis was the same as laid down in the report for 1925. Dr. Burke reports on the work done at the X-ray Clinic at Chesterfield as follows :—

“ The number of attendances at the Clinic during the year was 82. This number includes 5 patients who attended for consultation respecting the diagnosis and treatment of ringworm and other skin diseases, 2 cases of alopecia treated by

means other than X-rays, and 3 patients suffering from ringworm who could not be treated by X-rays on account of fright and restlessness.

Cases of scalp ringworm treated by X-rays numbered 70. Cure resulting in 62. Of the remaining cases 8 were treated by X-ray and supplemented by other treatment.

One case of bad multiple warts on the face and limbs received two courses of treatment by X-rays, using aluminium filters. but the result was unsatisfactory."

Ringworm of the Body. 165 children were found to have ringworm of the body, 163 being treated at the clinics and 2 otherwise.

Scabies. 59 cases were noted, 46 receiving treatment at the clinics and 13 otherwise.

Impetigo. As in previous years, this disease occupies the most prominent place and accounts for many exclusions from school which would be quite unnecessary if the children so affected were advised to seek treatment at once. In many cases it is secondary to dirty and verminous conditions and is therefore preventable. 987 cases were reported, 979 being treated at the clinics and 8 otherwise.

Other Skin Disease. A total of 466 was reported, 448 being treated under the Authority's scheme, and 18 otherwise.

(f) *External Eye Disease.* Under this heading Blepharitis and Conjunctivitis were again the two chief defects found in the course of medical inspection. 120 children were suffering from Blepharitis and 145 from Conjunctivitis. All simple cases are treated at the Minor Ailment Clinics, the more serious being referred to the Ophthalmic Surgeon.

(g) *Vision.* 3,348 children were discovered to be suffering from defective vision, of which number 1,577 required treatment. The scheme for the provision of glasses was fully described on page 15 of the report for 1925 ; the same arrangements still hold good. Further details of defects of vision are set out in the report of the Ophthalmic Surgeon on pages 22—24.

(h) *Ear Diseases.* For particulars of the procedure for ascertainment and treatment of these diseases see report of last year, and for the work carried out during 1926 see pages 19—22 of this report.

Dental Defects. 3,926 children were found by the Assistant School Medical Officers to have more than 4 carious teeth. Of these 61 were referred to the School Dentists for treatment. Of the 17,448 children inspected by the dental staff, 12,287 required treatment (76%), 6,192 were actually treated, and 2,681 re-treated.

Miss Dolan reports that there is no material change in the work from last year, except that the parents appreciate the service more and more and are availing themselves more readily of the facilities offered by the Council.

There has been a marked reduction in the number of dental inspections during the year, namely, from 39,310 in 1925 to 17,448 in 1926. It will be remembered that from January 1st, 1926 it became illegal to use the four Dental Dressers to carry out inspections with probe and mirror, and this accounts for the marked reduction. The inspections during 1926 were of necessity confined to the three dentists.

CRIPPLING DEFECTS.

For the last two years a special census of all cripples of school age throughout the County has been kept, and there is now in operation a system whereby a census of defectives of all classes will be kept continually up-to-date.

The total number of physical defective children in the County, and their classification, is shewn in Table III. The number of children suffering from crippling defects of a non-tubercular origin coming under the Council's Orthopædic scheme is tabulated below :—

	<i>School Age.</i>			<i>Under School Age.</i>		
	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Rickets	46	47	93	19	22	41
Scoliosis	34	77	111	—	—	—
Kyphosis and Lordosis	25	27	52	—	—	—
Polio-myelitis	149	124	273	8	6	14
Spastic conditions	24	13	37	1	2	3
Pseudo Hypertrophic Paralysis	14	—	14	—	—	—
Congenital Deformities	33	54	87	13	11	24
Deformities due to Injuries	24	9	33	1	—	1
Other Deformities	31	31	62	4	3	7
TOTALS ...	380	382	762	46	44	90

In Institutions (St. Gerard's Hospital and Shropshire Orthopædic Hospital) on January 1st, 1926 :—

15 Tubercular.

15 Non-Tubercular.

Admitted during 1926 :—

2 Tubercular.

17 Non-Tubercular.

Discharged during 1926 :—

16 Tubercular (these were transferred to
23 Non-Tubercular. Brethby).

Infectious Diseases. The procedure for dealing with infectious diseases in schools which was fully set out in booklet form, circulated to all Schools and Assistant School Medical Officers, and described in the Annual Report for 1925, has proved most satisfactory.

Exclusions from School. The number of temporary exclusions of individual children during the year is given in the following Table :—

TABLE D.

**CHILDREN TEMPORARILY EXCLUDED FROM SCHOOL
ON MEDICAL GROUNDS.**

(Excluding Verminous conditions.)

<i>Tuberculous Diseases</i>	243	<i>Blood and Heart Diseases.</i>	
		Anæmia	57
<i>Pre-Tuberculous Conditions</i> ...	43	Heart Disease	17
<i>Skin Diseases.</i>		<i>Nervous Diseases.</i>	
Eczema	3	Asthma	2
Impetigo	14	Chorea	13
Ringworm	144	Epilepsy	4
Scabies	19		
Other Skin Disease	5		
<i>Infective Diseases.</i>		<i>Debility.</i>	78
Chicken Pox	4		
German Measles	3	<i>Other Diseases.</i>	
Measles	4	Adenoids	4
Mumps	3	Bronchitis	74
Tonsilitis	22	Glands	9
Smallpox Contact	1	Influenza	3
Whooping Cough	4	Mentally Defective	3
<i>Eye Diseases.</i>		Pyrexia	7
Astigmatism	2	Rash	13
Blepharitis	8	Rheumatism	4
Conjunctivitis	40	Sore Throat	4
Cornical Ulcer	1	Miscellaneous	66
Defective Vision	1	Tonsils and Adenoids	5
Keratitis	17		
Myopia	1		
„ High	4	Tonsil and Adenoid Operations	1069
Nebula	1		
Phlyctenular Conjunctivitis ...	2	Total	2032
Squint	10		
„ Congenital	1		

The number of children permanently excluded from School during the year is as follows :—

TABLE E.
PERMANENT EXCLUSIONS.

Eye Diseases.

High Myopia	2
-------------	-----	-----	-----	-----	-----	-----	---

Nervous and Mental Diseases.

Feeble Minded	...	...	...	...	...	...	2
Epilepsy	...	...	...	...	...	...	3
Imbecile	...	...	...	...	...	...	3

Heart Disease.

Heart Disease	3
---------------	-----	-----	-----	-----	-----	-----	---

Other Diseases.

Diabetes	1
Effects of operation for Appendicitis	1
Tuberculosis	2

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School Closure. The number of Schools closed during the year on account of Infectious Disease is given in Table F. It is very satisfactory to note that only 14 schools were closed during the year in comparison with 52 in 1925. 1 school was closed by the School Medical Officer and 13 by the Local Sanitary Authority. It may again be mentioned here that if the power to exclude individual children be used to the best of advantage, it is only in special and quite exceptional cases that it will be necessary to close a school in the interests of public health.

TABLE F.

SCHOOL CLOSURE.

TABLE XVII.

No. of Schools or De- part- ments closed.	No. Closed by School Med. Officer.	No. Closed by Sanitary Author- ity.	REASON FOR CLOSURE.							
			In- fluenza.	Measles.	Whoop- ing Cough.	Chicken Pox.	Scarlet Fever.	Diph- theria.	Mumps.	Other Causes.
1915 34	23	11	—	21	1	1	6	1	2	1
1916 29	22	7	—	13	4	1	2	5	3	1
1917 15	13	2	—	8	1	2	1	1	1	1
1918 463	153	310	394	25	20	9	5	5	3	2
1919 70	28	42	28	32	1	1	2	4	1	1
1920 60	24	36	1	44	1	—	3	10	—	1
1921 59	19	40	39	2	7	—	4	6	1	—
1922 44	27	17	11	22	5	1	2	—	—	3
1923 42	23	19	2	21	6	1	5	—	2	5
1924 32	14	18	3	17	2	1	2	1	1	5
1925 52	10	42	11	33	6	—	—	1	—	—
1926 14	1	13	—	8	3	—	2	1	—	—

FOLLOWING UP.

As in previous years, the practice of having Medical Log Books in the schools has been adhered to. In cases where satisfactory action has not been taken by the parents to obtain medical attention for their child after a second notice has been sent, the School Nurse visits the home. During the year 13,729 such visits were made. In cases where these visits had no effect the School Managers were communicated with. During the year 150 letters were sent to School Managers. Replies were received with reference to 72 children; 18 of these had received medical treatment privately, 9 consented to treatment at the Clinics, 33 refused treatment and 12 had left school.

PHYSICAL TRAINING.

The Report of Mr. Hobson, the Organiser of Physical Training, on the work done during 1926, is an interesting one.

Progress has been made in every branch of physical education, particularly in swimming and folk dancing. Teachers devote much time out of school hours to this side of school life.

In commenting on the general policy adopted in teaching physical exercises, the Organiser points out that handkerchief drills continue to be an important factor in all physical training lessons, and precedes the breathing exercises at the beginning and end of each lesson."

Later, in speaking of the playgrounds, he suggests that these might in many cases be permanently marked out for games to avoid loss of time in repeatedly marking out pitches with chalk.

In his comments on organised games he states that 12 additional playing fields have been rented, accommodating 15 School Departments, making a total of 269 Departments now having the use of playing fields during school hours.

Swimming came in for very particular attention during the year and in this connection the actual work done is set out in tabular form below. The Organiser's report on swimming is as follows:—

“ New baths at Bolsover and Clay Cross became available for 14 school departments, and the Chesterfield Corporation Bath was used by one school out of school hours. The Belper Bath was closed for the greater part of the season owing to the coal shortage.

One life-saving class (experimental) was held at Cresswell, and out of nine members, seven obtained both the elementary and proficiency awards of the Royal Life Saving Society.

School galas were organised by the teachers in Bolsover, Clay Cross, Long Eaton and Matlock; and the Swimming Clubs of Cresswell and Langley Mill arranged galas in which events for school children were included.

The following Table shows the progress made during the last three years :—

	1924.	1925.	1926.
No. of Baths	5	9	12
No. of Depts. using Baths	24	45	58
Attendances	8,425	24,215	37,919
No. of certificates awarded	255	777	1,278

The cost of teaching a child to swim was approximately 4s.

SWIMMING TABLE "A."

BATH USED.	School Depts.	Attendances		CERTIFICATES AWARDED.										Totals		Other learners	
				1st Class		2nd Class		3rd Class									
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls		
Belper U.D.C. ...	7	186	95	—	—	—	—	—	—	—	—	—	—	—	—	—	
Bolsover U.D.C. ...	4	2,513	2,164	7	5	22	11	65	46	94	62	58	54	—	—	—	
Chesterfield Municipal ...	1	—	—	—	—	2	—	9	—	11	—	—	—	—	—	—	
Clay Cross Miners' Welfare ...	10	4,466	3,689	23	11	46	21	105	48	174	80	76	73	—	—	—	
Creswell Parish Council ...	2	1,166	1,363	10	7	16	15	16	28	42	50	25	66	—	—	—	
Darley Dale, Whitworth Inst. ...	3	670	851	1	5	4	12	8	19	13	36	11	8	—	—	—	
Derby (2 baths) Municipal ...	2	762	784	5	2	8	3	13	18	26	23	16	11	—	—	—	
Langley Mill U.D.C. ...	11	2,575	1,957	11	10	28	28	57	41	96	79	96	79	—	—	—	
Long Eaton L.E.A. ...	8	7,465	5,838	62	4	65	8	143	76	270	88	142	121	—	—	—	
Matlock Private ...	8	480	240	6	3	9	1	25	5	40	9	13	20	—	—	—	
Ripley Miners' Welfare ...	2	415	240	20	12	14	7	15	17	49	36	19	21	—	—	—	
Totals ...	58	20,698	17,221	145	59	214	106	456	298	815	463	456	453	—	—	—	

"Other learners" include children who have learned to swim but who cannot dive into deep water and swim 25 yards as required for the 3rd Class Certificate.

In addition to the above awards 7 Elementary and 7 Proficiency Certificates of the Royal Life Saving Society were gained.

Notes regarding Proficiency Certificates.

Requirements for 3rd class certificates.—To dive into bath and swim 25 yards any stroke.

Requirements for 2nd class certificate.—To swim 50 yards breast stroke, to swim 25 yards back stroke, to execute object dive from surface of water.

Requirements for 1st class certificates.—To swim 200 yards using any stroke except the breast stroke, and to demonstrate the breast stroke, to swim 50 yards on the back, to execute neat dive from 1st step of diving platform, and to perform 1st method of life-saving.

The object of the instruction is to teach as many as possible to swim moderately well, rather than to produce a few experts.

A large number of 3rd class certificates is therefore desirable.

Regular attendance at the baths is essential.

Where no teacher or student teacher on the staff is available to take parties to the baths, children under 12 years of age are not allowed to go.

Dancing. In this connection the Organiser reports as follows :—

“ Interest in the revival of Old English dances continues to spread, and 12 more Folk Dance Clubs have been formed in the County. As the natural result of this work a Derbyshire Branch of the English Folk Dance Society has been formed, and this branch will no doubt carry on the work by unifying the whole and establishing new centres.

The classes conducted by the local clubs have given a great impetus to the dancing in schools, and the teachers have spent many hours after school in conducting classes for children and in organising evening parties for scholars, present and past.

The large increase in the number of entries for the various Musical Festivals (Folk Dance Section) is evidence of the widespread popularity of these Folk Dances.”

Holiday Camp. The Organiser reports as follows :—

“ The Local Education Authority assisted 148 boys to attend the first holiday camp held under the auspices of the Derbyshire Schools Camping Association at Bamford, near Sheffield, from the 4th to the 11th August.

PROVISION OF MEALS.

As a result of the industrial dispute of 1926 it was found necessary to provide meals for school children to a limited extent. This was done through local agencies, 20,487 meals being provided at a total cost of £182 0s. 8d.

CO-OPERATION OF PARENTS.

During the year 10,915 parents were present at medical inspections. It is of the utmost importance that parents should be present as in many cases very valuable aid is given to the School Medical Inspector by information received from the parents, whilst advice as to treatment etc. can be given to the parents by the School Medical Inspector.

CO-OPERATION OF TEACHERS.

Much of the good achieved by the School Medical Service is due to the co-operation of the teaching staff who, in most cases, give all the help they can, both during Medical Inspection in seeking advice as to treatment for the Scholars, and subsequently in seeing that the treatment recommended is procured.

CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

The School Attendance Officers give considerable help in bringing to the notice of School Medical Officer cases of prolonged absenteeism due to ill-health, and arranging where possible for such cases to be examined by the Assistant School Medical Officer, or visited by the School Nurse.

CO-OPERATION OF VOLUNTARY BODIES.

As in previous years the National Society for the Prevention of Cruelty to Children have given valuable aid in bringing forward cases for medical inspection and in seeing that treatment is carried out where the home circumstances are unsatisfactory.

A means of transport for conveying crippled children to and from the orthopædic clinics and the Brethby Hall Orthopædic Hospital is very badly needed, and I might again suggest that voluntary organisations, or even individuals in possession of motor cars, could be of great assistance in carrying out this work.

BLIND, DEAF, DEFECTIVE & EPILEPTIC CHILDREN.

There is still inadequate provision for defectives in this County, the deficiency being most marked in regard to mental defectives.

At present a scheme is under consideration for the provision of institutional treatment for physical defectives.

In regard to the totally blind, there is not the same difficulty, only 9 out of 29 not being provided for in special schools, generally on account of the parents refusing to consent to their going from home. In these cases the Derby and Derbyshire Association for the Blind undertake to see that the children's education is attended to at home.

SECONDARY SCHOOLS.

Inspection of the scholars attending the Secondary Schools has been carried out as in previous years, every child being examined once a year. Re-examinations are made where necessary.

EMPLOYMENT OF CHILDREN & YOUNG PERSONS.

The following Table gives particulars of the medical inspections under the Employment of Children Bye-laws.

No. of Applications.	No. Disallowed.	No. Allowed.	Delivery of Newspapers.	Delivery of Milk.	Errands.	Farm Work.	Grocer's Shop.
41	2	39	23	11	2	2	1

EAR, NOSE & THROAT DISEASES

Dr. Purce, Ear, Nose and Throat Surgeon, reports that :—

“ During the year 1926, 5,475 children out of a total number of 27,048 have been referred for examination and treatment of ear, nose and throat defects. Out of these 5,475 children, 1,476 have had operations for the removal of tonsils and adenoids.

It is satisfactory to find firstly, that there is a marked decrease in the percentage of children suffering from otitis media, which means that our preventive work is having effect ; and secondly, that more and more children below school age are being brought for observation and treatment.

The two most common difficulties met with in the work are still partial deafness and nasal sinusitis in children from 8 to 14 years of age, and I urge the special class for partially deaf children, of which, unfortunately, there are still too many.”

EAR, NOSE AND THROAT CLINICS.

CLASSIFIED LIST OF CASES TREATED.

DEFECT OR DISEASE.	DERBY AND CHINLEY AREA.	CHESTER- FIELD AREA.
EAR.		
A. <i>External.</i>		
Furunculosis	101	15
Foreign Body	4	6
Impetigo	20	30
Wax	90	106
Keratosis Obturans	20	30
Cysts	2	4
Absence of lobe	1	2
B. <i>Middle Ear.</i>		
Ae. Supp. Otitis Media ...	10	15
Chronic	110	120
Tubercular Otitis	4	6
<i>Sequelæ of C.O.M.S.</i>		
Granulations	10	20
Polypi	6	10
Mastoiditis	4	1
<i>Middle Ear Catarrh.</i>	40	70
C. <i>Internal Ear.</i>		
Congenital (Deaf & Dumb)	4	6
Acquired	6	8
NOSE.		
A. <i>External.</i>		
Dermatitis	15	25
Impetigo	10	15
B. <i>Nasal Cavities.</i>		
Deviated Septum	40	50
Enlarged Turbinates ...	120	115
Vaso-motor Rhinitis ...	40	30
Atrophic "	4	4
Epistaxis	10	16
Nasal neuroses	20	25
Nasal Polypi	4	10
Nasal Diphtheria	4	6
C. <i>Accessory Nasal Sinuses.</i>		
Ethmoidal Catarrh	30	25
" Suppuration	2	3
Antral Suppuration	1	2
NASO-PHARYNX.		
Adenoid only	15	20
Posterior ends	8	10
Chronic naso-pharyngeal Catarrh	30	40
ORO-PHARYNX.		
Hypertrophy of faucial tonsil and adenoids	1026	1035
Acute Tonsillitis	10	25
Bifid Uvula	6	10
Palatal Paralysis	3	5

DEFECT OR DISEASE.	DERBY AND CHINLEY AREA.	CHESTER- FIELD AREA
LARYNX.		
Acute Catarrhal Laryngitis ...	6	10
Chronic Catarrhal Laryngitis ...	10	15
Tumours	1	—
Specific	2	1
T.B.	2	2
Laryngeal Paralysis	1	1
MISCELLANEOUS & ASSOCIATED CONDITIONS.		
Cleft palate	4	6
Chorea	20	16
Rheumatism	40	30
Albuminuria	6	15
Mongolism	6	10
Heart conditions	20	40
Bronchitis	80	120
Cervical adenitis	120	180
Rickets	20	30
Cretinism	4	5

CASES EXAMINED.

Area.			New Cases.	Old Cases.	Re- Examinations
Derby	...	...	1001	890	700
Chesterfield	...	...	1039	1072	773
Total			2040	1962	1473

Total No. of New Cases	...	2040
„ „ Old Cases	...	1962
„ „ Re-examinations		1473
		—
„ „ Cases seen	...	5475
		—

OPERATIONS PERFORMED.

NATURE OF OPERATION.	DERBY AREA.	CHEST'RF'D AREA.	SHIREBR'K AREA.	CHINLEY AREA.	ASH- BOURNE AREA.
Enlarged Tonsils & Adenoids	640	440	130	125	96
Adenoids	10	15	4	4	1
Turbinectomy	5	4	1	1	—
Nasal Polypi	5	5	1	—	—
Aural Polypi	3	5	2	—	—
Other forms of special treatment <i>e.g.</i> , Ionisation	8	6	—	—	—
Ultra Violet	10	—	—	—	—
Totals	663	469	138	130	97

Total No. of Operations ... 1,497.

RESULTS OF OPERATIONS.

Defect.	Discharged and Cured.	Improved.	In Statu Quo.	Refuse i Operation or Operation done elsewhere
Enlarged Tonsils and Adenoids causing obstruction	980	70	30	160
Tonsils and Adenoids for O.M.S. ...	80	40	10	—
„ „ „ C.C.O.M. ...	25	10	15	—
„ „ for reflex conditions	80	40	10	—
„ „ for general conditions	30	10	10	—
<i>Post operative complications—</i>				
Secondary Hæmorrhage 4				
Pncumonia 2				
Mastoiditis 4				
Acidosis 2				
Renal Hæmorrhage 1				
Total	1195	170	75	160

OPHTHALMIC REPORT.

During the past year the work of the eye department has been carried out on the same lines as heretofore.

An analysis of cases is given hereunder ; other statistics will be found under Tables III. and IV.

CENTRE.	NEW CASES.		OLD CASES.		Total.
	Re-fraction.	Treat-ment.	Re-fraction.	Treat-ment.	
Dr. WYATT GUNNING.					
Beighton ...	48	4	25	—	77
Bolsover ...	41	3	19	5	68
Clowne ...	47	—	20	3	70
Dronfield ...	36	—	22	—	58
Eckington ...	44	2	38	2	86
Shirebrook ...	94	18	65	19	196
	310	27	189	29	555
Mr. ASHDOWN CARR.					
Ashbourne ...	16	—	5	—	21
Bakewell ...	22	4	3	—	29
Belper ...	119	4	30	—	153
Buxton ...	32	3	5	—	40
Chesterfield ...	339	49	133	80	501
Chinley ...	114	4	25	3	146
Clay Cross ...	22	2	2	1	27
Derby ...	364	57	164	76	661
Long Eaton ...	119	8	9	1	137
Matlock ...	81	7	18	—	106
Ripley ...	131	11	25	13	180
Swadlincote ...	123	2	21	3	149
Wirksworth ...	26	3	3	1	33
Woodville ...	16	3	1	1	21
	1524	157	444	179	2304
GRAND TOTAL					2859

The conditions found at the examination of the 2,018 children are summarised below :

No abnormality	...	...	...	...	...	158
Errors of refraction :	Hypermetropia and hypermetropic astigmatism (cases of long sight)					1163
	Myopia, myopic astigmatism and mixed astigmatism (cases of short sight)					519
Disturbances of Motility :—						
	Strabismus (Squint)—convergent				...	311
	" " divergent				...	13
	Other abnormalities				...	24
Affections of the lids :—						
	Blepharitis (inflamed lids)				...	48
	Other abnormalities				...	14

Affections of the Conjunctiva	...	...	...	...	49
„ „ Cornea—Ulcers	...	...	...	...	17
„ „ „ Keratitis, non-ulcerative	...	...	...	...	7
„ „ „ Opacities	...	...	...	...	35
„ „ „ Other abnormalities	...	...	...	...	4
„ „ Lachrymal apparatus (tear passages)	...	...	...	...	3
„ „ Iris	...	...	...	...	5
„ „ Lens	...	...	...	...	24
„ „ Fundus oculi (choroid, retina, optic nerve)	...	...	...	...	38
Other Ocular conditions	...	...	...	...	24
Abnormalities of central nervous system (mental dullness, hysteria, word blindness, etc.)	...	...	...	...	23
Symptoms due to non-ocular conditions	...	...	...	...	19
Examinations incomplete	...	...	...	...	17

Surgical Appliances Fund. For many years an annual collection has been made in the first week in December in the different schools in the County for the provision of surgical appliances and spectacles to necessitous cases. From this fund surgical appliances have been supplied to children attending the centres. For 1926-27 £585 8s. 1d. was collected and divided as follows :—

	£	s.	d.
Surgical Appliances Fund	245	4	3
Derbyshire Royal Infirmary	116	8	3
Chesterfield & North Derbyshire Hospital	45	11	0
Derbyshire Children's Hospital	35	0	7
Burton-on-Trent Infirmary	25	13	3
Mansfield & District Cottage Hospital	30	0	5
Miscellaneous (less than £20 each)	87	10	4
	£585	8	1

TUBERCULOSIS IN SCHOOL CHILDREN.

NOTIFICATION.

NOTIFICATION OF TUBERCULOSIS IN SCHOOL CHILDREN

Ages 5 to 15.

The following Table shows the notifications on Forms A and B of School Children, aged 5 to 15, for the years 1913 to 1926 :—

Year.	FORM A.				FORM B.				Total Notifications Ages 5—15				
	Pulmon-ary.		Non Pul-monary.		Total Form A.		Pulmon-ary.			Non-Pul-monary.		Total Form B.	
	M.	F.	M.	F.		M.	F.	M.		F.		M.	F.
1913	60	76	105	89	330	17	23	26	15	81		411	
1914	75	92	65	74	306	18	22	16	17	73		379	
1915	67	76	48	35	226	24	13	18	13	68		294	
1916	79	120	62	63	324	24	20	13	15	72		396	
1917	88	112	58	52	310	10	9	6	6	31		341	
1918	84	88	53	59	284	2	2	1	2	7		291	
1919	95	110	80	47	332	7	11	13	5	36		368	
1920	100	108	75	62	345	6	14	3	7	30		375	
1921	59	59	58	43	219	1	2	4	2	9		228	
1922	42	52	52	28	174	1	4	2	4	11		185	
1923	64	59	54	40	217	—	3	1	1	5		222	
1924	62	57	80	60	259	3	1	2	3	9		268	
1925	68	78	61	30	237	3	4	3	1	11		248	
1926	61	43	78	52	234	2	—	—	—	2		236	

INSTITUTIONAL TREATMENT OF TUBERCULOUS CHILDREN.

DERBYSHIRE SANATORIUM.

PULMONARY CASES.

			Males.	Females.	Total.
Children in the Sanatorium on 1st					
January, 1926	...	...	20	15	35
Admissions					
Definite Cases	...	...	40	35	75
Observation Cases	...	...	10	2	12
Discharges	...	...	
Definite Cases			45	41	86
Observation Cases	...	...	13	2	15
Children in the Sanatorium on 31st					
December, 1926	...	...	12	9	21
Condition of cases on discharge :—					
Definite Cases					
Quiescent	...	...	...	8	
Improved	...	...	...	73	
No material improvement				3	
Died in the Institution	...		—		
Observation Cases					
Definitely Tuberculous	...			14	
Non-Tuberculous	...			2	
Doubtfully Tuberculous				1	

BACTERIOLOGICAL EXAMINATIONS.

During the year ending December 31st, 1926, 1,203 School Specimens were examined in the County Laboratory. Details of these are as follows:—

			Positive.	Negative.
Swabs for Diphtheria	...		25	648
Hairs for Ringworm	...	...	273	164
Eye Smears	...	...	3	1
Eye Cultures	...	...	12	12
Urine for Albumin	...	...	8	45
Miscellaneous	...	...	4	8
			<hr/>	<hr/>
Totals	...		325	878
			<hr/>	<hr/>

SCHOOL NURSING SERVICE.

Below is a summary of the work done by the School Nurses during the year:—

Medical Inspections (Elementary Schools)	30,835	
Medical Inspections (Secondary Schools)	2,687	
	<hr/>	33,522
Vermineous Inspections	...	164,803
Other Inspections	...	47,806
Visits to Homes following up cases	...	13,729
Visits to Mentally Deficient Children	...	297
		<hr/>
		260,157
		<hr/>

EXAMINATION OF PUPIL TEACHER CANDIDATES.

There were 458 intending pupil teachers examined during 1926, 114 boys and 344 girls, with the following results:—

					Boys.	Girls.	Total.
Number accepted	...	...	...	...	102	337	439
„ deferred for the remedy of various defects	...	...	...	...	12	3	15
Number rejected	...	...	...	...	—	4	4
					<hr/>	<hr/>	<hr/>
					114	344	458
					<hr/>	<hr/>	<hr/>

SECTION II.

TABLES OF THE BOARD OF EDUCATION.

TABLE 1.

NUMBER OF CHILDREN INSPECTED 1st JANUARY,
1925, TO 31st DECEMBER, 1926.

A.—ROUTINE MEDICAL INSPECTIONS.

Age.	ENTRANTS.						Inter- mediate Group 8—9	LEAVERS.					
	3	4	5	6	Other Ages.	Total.		12	13	14	Other Ages.	Total.	Grand Total.
Boys ..	31	332	3907	818	115	5203	3849	3111	1239	66	1	4417	13469
Girls ..	—	177	3773	877	137	4964	3951	3512	1108	44	—	4664	13579
Total ..	31	509	7680	1695	252	10167	7800	6623	2347	110	1	9081	27048

B.—OTHER INSPECTIONS.

		SPECIALS.	RE-EXAMS.	GRAND TOTALS.	
Boys ..		1133	722	Boys ..	15324
Girls ..		1209	723	Girls ..	15511
Total ..		2342	1445	Total ..	30835

TABLE 1 (continued)—DERBYSHIRE SECONDARY SCHOOLS.

A.—Routine Medical Inspection.

No. of Children Inspected—Boys 934 Enrolment, Feb 1st, 1926—Boys 1076
Girls 1753 Total 2,687 Girls 1599 Total 2675

SCHOOL.	SEX.	AGES.														Total.
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Belper, Herbert Strutt	Boys Girls	— —	— —	— —	3 1	— 2	3 22	17 42	15 40	16 31	11 30	4 24	5 18	— 6	— 1	74 217
Buxton, Cavendish Girls' High	Boys Girls	— —	— —	— —	— 1	— 8	— 16	— 50	— 49	— 34	— 29	— 21	— 9	— 2	— —	— 219
Chesterfield, Girls' High	Boys Girls	6 12	4 8	— 18	— 22	— 33	— 67	— 63	— 35	— 43	— 30	— 30	— 24	— 4	— —	10 389
Clay Cross Secondary	Boys Girls	— —	— —	— —	— —	10 5	17 25	19 24	27 32	21 8	16 19	9 27	7 13	1 2	— —	127 155
Glossop Grammar	Boys Girls	— —	— —	— —	— —	1 3	15 15	25 24	26 20	24 15	21 17	12 21	3 8	2 4	1 1	130 128
Heanor Secondary	Boys Girls	— —	— —	— —	— —	4 5	22 20	41 15	39 35	18 24	19 18	9 15	6 10	2 1	— 1	160 144
Ilkeston Secondary	Boys Girls	— —	— —	— 2	2 2	1 17	3 16	4 31	6 22	5 13	7 10	6 16	3 7	2 —	— —	39 136
Long Eaton Secondary	Boys Girls	— —	— —	— —	— —	— —	— —	1 5	3 —	9 —	9 2	8 3	5 4	3 3	— —	38 17
Matlock Secondary	Boys Girls	— —	— —	— —	— —	2 3	16 15	14 28	25 24	18 7	5 4	1 1	— —	— —	— —	81 82
New Mills Secondary	Boys Girls	— —	— —	— —	— —	— 6	20 20	40 18	39 18	24 19	33 15	9 7	7 7	— 1	— —	172 111
Shirebrook P.T.'s Centre	Boys Girls	— —	— —	— —	— —	— —	— —	— 3	— 1	— —	— 14	— 7	— 10	— 3	— —	— 38
Swanwick Hall Secondary	Boys Girls	— —	— —	— —	— —	4 —	19 26	24 27	19 17	13 11	16 18	6 15	2 1	— 2	— —	105 117

In addition the following examinations were made:—

	Boys	Girls	Specials.	Re-examinations.	Total.
	52	11		107	159
				349	360
Total	63			456	519

TABLE II. A.

Return of Defects found in the course of Medical Inspection in 1926.

DEFECT OR DISEASE.				Routine Inspections.		Specials.	
				Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.
	Malnutrition	..	..	40	1976	6	24
	Uncleanliness	..	..	228	1834	2	6
Skin	Ringworm—						
	Scalp	..	..	1	40	6	8
	Body	..	..	—	5	1	—
	Scabies	..	..	4	19	7	3
	Impetigo	..	..	10	92	6	7
	Other Diseases (non-tuberculous)			10	411	4	14
Eye	Blepharitis	..	..	10	91	8	11
	Conjunctivitis	..	..	18	121	3	3
	Keratitis	..	..	—	—	—	—
	Corneal Opacities	..	..	1	1	3	1
	Defective Vision (excl'd Squint)			1251	1694	326	75
	Squint	..	..	199	165	42	10
	Other Conditions	..	..	19	27	9	11
Ear	Defective Hearing	..	..	89	159	29	19
	Otitis Media	..	..	1	22	13	9
	Other Ear Diseases	..	..	86	196	14	13
Nose and Throat	Enlarged Tonsils only	..	..	1648	3182	332	133
	Adenoids only	..	..	59	196	30	13
	Enlarged Tonsils and Adenoids			722	680	144	27
	Other Conditions	..	..	13	18	10	9
	Enlarged Cervical Glands (Non-Tuberculous)	..		80	2883	34	8
	Defective Speech	..	..	—	92	—	8
Teeth	Dental Diseases	..	..	3296	—	61	—
	Sepsis	..	..	361	—	12	—
Heart and Circulation	Heart Disease—						
	Organic	..	..	39	446	10	49
	Functional	..	..	3	226	2	13
	Anæmia	..	..	30	211	12	—
Lungs	Bronchitis	..	..	5	153	7	16
	Other Non-Tuberculous Diseases			45	685	17	35
Tuberculosis	Pulmonary—						
	Definite	..	..	2	27	6	14
	Suspected	..	..	8	14	27	8
	Non-Pulmonary—						
	Glands	..	..	—	17	1	12
	Spine	..	..	—	—	—	—
	Hip	..	..	1	5	1	5
	Other Bones and Joints	..	..	—	3	—	7
Nervous System	Skin	..	..	—	1	2	—
	Other Forms	..	..	1	1	—	—
	Epilepsy	..	..	1	30	3	9
Deformities	Chorea	..	..	2	9	2	6
	Other Conditions	..	..	—	2	—	5
Other Defects and Diseases	Rickets	..	..	4	100	—	5
	Spinal Curvature	..	..	1	101	4	—
	Other Forms	..	..	8	317	6	83
Other Defects and Diseases				26	477	10	30

**B.—Number of Individual Children found at Routine Medical
Inspection to require Treatment (excluding Uncleanliness
and Dental Diseases).**

GROUP. (1)	Number of Children.		Percentage of Children found to require Treatment. (4)
	Inspected. (2)	Found to require Treatment. (3)	
<hr/>			
CODE GROUPS :—			
Entrants 	10167	1536	15·1
Intermediates	7800	1449	18·5
Leavers 	9081	1447	15·9
<hr/>			
Total (Code Groups) 	27048	4432	16·3

TABLE II. A—continued.

SECONDARY SCHOOLS.

Return of Defects found in the course of Medical Inspection.

Enuonment February 1st.—Boys 1076, Girls 1599, Total 2675.

DEFECT OR DISEASE.					Number referred for Treatment.		Number requiring to be kept under observation, but not referred for treatment.	
					Boys.	Girls.	Boys.	Girls.
Malnutrition					9	—	61	43
Uncleanliness—								
Head					—	—	2	58
Body					—	—	9	15
Skin	{	Ringworm—						
		Head			—	—	1	1
		Body			—	—	1	—
		Scabies			—	—	1	—
		Impetigo			—	—	—	—
Other (Non-Tubercular) ...					—	1	20	77
Eye	{	Blepharitis			1	—	2	1
		Conjunctivitis			—	—	—	17
		Corneal Opacities			1	1	—	—
		Defective Vision			60	160	41	140
		Squint			1	—	3	18
Other Conditions					—	—	2	4
Ear	{	Defective Hearing			11	4	6	6
		Otitis Media			3	—	—	—
		Other Ear Diseases			1	1	5	2
Naso-pharyngeal	{	Enlarged Tonsils			20	130	131	250
		Adenoids			2	7	22	17
		Enlarged Tonsils & Adenoids ...			19	27	33	16
		Other Conditions			—	—	6	1
Glands	{	Enlarged Cervical and Sub-maxillary			4	7	118	395
		Goitre			13	5	81	517
Teeth	{	Carious Teeth			79	150	300	654
		Sepsis			6	—	1	—
Heart	...	O. & F. not classified ...			10	6	91	60
Anæmia	...	... ..			2	—	28	12
Rickets	...	... ..			—	—	2	8
Digestive Apparatus	...	... ..			2	—	—	1
Lungs	{	Bronchitis			4	—	3	1
		Other non-tubercular Disease			4	—	37	12

TABLE II A—*continued.*SECONDARY SCHOOLS—*continued.*

Return of Defects found in the course of Medical Inspection.

DEFECT OR DISEASE.					Number referred for treatment.		Number requiring to be kept under observation, but not referred for treatment.				
							Boys.	Girls.	Boys.	Girls.	
<i>Tubercu- losis.</i>	{	Pulmonary—									
		Definite				1	1	3	2		
		Suspected				2	—	8	1		
		Non-Pulmonary—									
		Glands				1	—	—	1		
		Spine				—	—	—	—		
		Hip				—	—	—	—		
		Other Bones and Joints ...				—	—	—	—		
<i>Nervous System.</i>	{	Skin				—	—	—	—		
		Other forms				—	—	—	—		
		Epilepsy				—	—	—	—		
		Chorea				—	—	—	—		
		Other forms				—	—	—	1		
		<i>Deformities</i>	{	Spinal Curvature				2	—	4	11
				Thorax				—	—	3	—
				Flat Foot				3	—	182	43
Other				—	—	34	18				
Defective Speech					—	—	13	20			
Mouth Breathing					1	—	10	8			
Other Defects and Diseases					9	1	9	5			

TABLE III.

Return of all Exceptional Children in the Area.

		Boys.	Girls.	Total.
<i>Blind (including partially blind)—</i>	Attending Certified Schools or Classes for the Blind	10	7	17
(i.) Suitable for training in a School or Class for the totally blind.	Attending Public Elementary Schools	2	1	3
	At other Institutions	—	—	—
	At no School or Institution ...	3	6	9
(ii.) Suitable for training in a School or Class for the partially blind.	Attending Certified Schools or Classes for the Blind	—	—	—
	Attending Public Elementary Schools	26	41	67
	At other Institutions	—	—	—
	At no School or Institution ...	4	4	8
<i>Deaf (including deaf and dumb and partially deaf)—</i>	Attending Certified Schools or Classes for the Deaf	16	10	26
(i.) Suitable for training in a School or Class for the totally deaf or deaf and dumb.	Attending Public Elementary Schools	—	1	1
	At other Institutions	—	1	1
	At no School or Institution ...	—	1	1
(ii.) Suitable for training in a School or Class for the partially deaf.	Attending Certified Schools or Classes for the Deaf	8	3	11
	Attending Public Elementary Schools	14	15	29
	At other Institutions	—	—	—
	At no School or Institution ...	1	—	1
<i>Mentally Defective—</i>	Attending Certified Schools for Mentally Defective Children ...	2	2	4
Feeble-minded (cases not notifiable to the Local Control Authority.)	Attending Public Elementary Schools	229	192	421
	At other Institutions	—	2	2
	At no School or Institution ...	62	49	111
Notified to the Local Control Authority during the year.	Feeble-minded	—	4	4
	Imbeciles	5	7	12
	Idiots	1	1	2
<i>Epileptics—</i>	Attending Certified Special Schools for Epileptics	1	1	2
Suffering from severe epilepsy.	In Institutions other than Certified Special Schools	1	—	1
	Attending Public Elementary Schools	2	4	6
	At no School or Institution ...	19	15	34
Suffering from epilepsy which is not severe.	Attending Public Elementary Schools	26	21	47
	At no School or Institution ...	10	19	29
<i>Physically Defective—</i>	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	2	3	5
Infectious pulmonary and glandular tuberculosis	At other Institutions	1	—	1
	At no School or Institution ...	27	30	57

TABLE III.—*continued*.

		Boys.	Girls	Total.
<i>Physically Defective (continued)—</i>				
Non-infectious but active pulmonary and glandular tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	10	6	16
	At Certified Residential Open Air Schools	—	—	—
	At Certified Day Open Air Schools	—	—	—
	At Public Elementary Schools ...	99	90	189
	At other Institutions	—	—	—
	At no School or Institution	5	8	13
Delicate children (<i>e.g.</i> , pre- or latent tuberculosis, malnutrition, debility, anæmia, etc.)	At Certified Residential Open Air Schools	—	—	—
	At Certified Day Open Air Schools	—	—	—
	At Public Elementary Schools ...	185	156	341
	At other Institutions	1	1	2
	At no School or Institution	1	4	5
Active non-pulmonary tuberculosis	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	29	12	41
	At Public Elementary Schools ...	86	69	155
	At other Institutions	2	2	4
	At no School or Institution	21	14	35
Crippled Children (other than those with active tuberculous disease), <i>e.g.</i> , children suffering from paralysis, etc., and including those with severe heart disease.	At Certified Hospital Schools ...	5	4	9
	At Certified Residential Cripple Schools	2	—	2
	At Certified Day Cripple Schools ...	—	—	—
	At Public Elementary Schools ...	353	404	757
	At other Institutions	—	—	—
	At no School or Institution	62	32	94

TABLE IV.

Return of Defects treated during the year ended
31st December, 1926.

Treatment Table.

Group I.—Minor Ailments (excluding Uncleanliness,
for which see Group V.).

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Skin :—			
Ringworm Scalp	485	12	497
Ringworm Body	163	2	165
Scabies	46	13	59
Impetigo	979	8	987
Other Skin Disease	448	18	466
Minor Eye Defects	576	25	601
(External and other, but excluding cases falling in Group II.)			
Minor Ear Defects	533	42	575
Miscellaneous	1260	500	1760
(e.g., minor injuries, bruises, sores, chil- blains, etc.)			
Total	4490	620	5110

Group II.—Defective Vision and Squint (excluding Minor Eye Defects Treated as Minor Ailments.—Group I.).

Defect or Disease.	Number of Defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme.	Otherwise	Total.
Errors of Refraction (including Squint)	1834	148	...	1982
Other Defect or Disease of the Eyes (excluding those recorded in Group I.) ...	184	...	...	184
Total	2018	148	...	2166

Total number of children for whom spectacles were prescribed

(a) Under the Authority's Scheme 1230

(b) Otherwise 148

Total number of children who obtained or received spectacles

(a) Under the Authority's Scheme 1054

(b) Otherwise 148

Group III.—Treatment of Defects of Nose and Throat.

Number of Defects.				
Received Operative Treatment.				
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital, apart from the Authority's Scheme.	Total.	Received other forms of treatment.	Total number treated.
1497	344	1841	309	2150

Group IV.—Dental Defects.

(1) Number of Children who were :—

(a) Inspected by the Dentist :

Aged :

Routine Age Groups	}	5	1818	}	Total 16904
		6	2165		
		7	1712		
		8	1830		
		9	1737		
		10	1878		
		11	1912		
		12	1864		
		13	1586		
		14	402		
Specials	544
Grand Total					17448
(b) Found to require treatment					12287
(c) Actually treated					6192
(d) Re-treated during the year as the result of periodical examination					2681

(2) Half-days devoted to—

Inspection	141		
Treatment	1161	Total	1302

(3) Attendances made by children for treatment 8898

(4) Fillings—

Permanent Teeth	4281		
Temporary Teeth	941	Total	5222

(5) Extractions

Permanent Teeth	2849		
Temporary Teeth	15631	Total	18480

(6) Administrations of General
anæsthetics for extractions :— 847

(7) Other Operations

Scalings	1213		
Dressings	3718	Total	4931

Group V.—Uncleanliness and Verminous Conditions.

Average number of visits per school made during the year by the School
Nurses 5

Total number of examinations of children in the Schools by School Nurses 178619

Number of individual children found unclean 3524

Number of children cleansed under arrangements made by the Local
Education Authority 1

Number of cases in which legal proceedings were taken :—

(a) Under the Education Act, 1921 Nil

(b) Under School Attendance Byelaws Nil

VACCINATION.

Division and District.	Number Examined.	Number Vaccinated	Unvaccinated.	
			Number	Percentage
NORTH-EAST DERBYSHIRE.				
Chesterfield Rural	5,369	1,685	3,684	68·6
Blackwell Rural	2,959	657	2,302	77·7
Clowne Rural	970	261	709	73·0
Norton Rural	215	86	129	59·9
Bolsover Urban... ..	1,445	336	1,109	76·7
Brampton & Walton Urban ...	196	71	125	63·7
Clay Cross Urban	698	199	499	71·4
Dronfield Urban	326	67	259	79·4
Alfreton Urban	1,290	342	948	73·5
Heanor Urban	1,191	316	875	73·4
Ripley Urban	780	101	679	87·0
Total ...	15,439	4,121	11,318	73·3
WEST DERBYSHIRE.				
Bakewell	1,028	349	679	66·0
Bakewell Urban	129	66	63	48·8
Baslow Urban	53	35	18	33·9
Bonsall Urban	53	11	42	79·2
Matlocks Urban, The	198	29	169	85·3
North Darley Urban	—	—	—	—
South Darley Urban	31	6	25	80·6
Ashbourne Urban	242	109	133	57·5
Ashbourne Rural	438	231	207	47·2
Chapel-en-le-Frith-Rural ...	717	257	460	46·1
Repton Rural	814	336	478	58·7
Sudbury Rural	129	86	43	33·3
Total ...	3,832	1,515	2,317	60·4
SOUTH-EAST DERBYSHIRE.				
Basford	49	19	30	61·2
Belper Urban	537	31	506	94·2
Belper Rural	1,333	290	1,043	78·2
Heage Urban	203	35	168	82·7
Wirksworth Urban	155	26	129	83·2
Shardlow Rural	1,746	424	1,322	75·7
Long Eaton Urban	1,140	313	827	72·5
Alvaston & Boulton Urban ...	191	42	149	78·0
Total ...	5,354	1,180	4,174	77·9
NORTH DERBYSHIRE.				
Hayfield Rural	45	24	21	46·6
Glossop Rural	133	34	99	74·4
New Mills Urban	408	146	262	64·2
Total ...	586	204	382	65·1
SOUTH DERBYSHIRE.				
Hartshorn & Seals Rural ...	479	129	350	73·0
Swadlincote Urban	1,358	344	1,014	74·6
Total ...	1,837	473	1,364	74·2
THE WHOLE COUNTY ...	27,048	7,493	19,555	72·3

APPENDIX I

GOITRE.

In my Report for 1925 I dealt at some length with the subject of goitre. In that report I pointed out the need for the adoption of a cautious attitude with regard to the administration of iodine as a public health measure, and also that iodine deficiency was not *the* cause of goitre. I accentuated the differences between childhood goitre and true endemic goitre. Minor points raised in my report were the difficulties of obtaining a correct estimation of the iodine content of food, water, and soil, and the inaccuracies which are likely to result from the collection of figures from a series of observers.

Since writing that report I have found no reason to change my opinion on this question as a whole or in any of the particulars which I mention, but, on the other hand, much evidence has been produced which confirms my beliefs.

The experiments in Derbyshire which were mentioned in my report for 1925 were of particular value by reason of the fact that they were instituted by those who have preached from the house-tops their whole-hearted belief in iodine, and have not hesitated to recommend its broadcast use by the general public. Amongst those who, since the publication of the results, have been foremost in attacking the technique of the experiments, were those who were intimately connected with the formulation of them, and who, when the experiments had been running for about four months (i.e. in May, 1925) had written "The method employed is, in my opinion, superior to the American plan. The amount needed for the day is weighed out and dissolved in a gallon of water. It is placed in a glass vessel, and connected by means of a small pipe with the service. The flow is so regulated that each stroke of the pump allows the admission of a few drops, and in that way the addition of the salt is spread over 24 hours. Nothing could be simpler."

It fell to me to publish the results of these experiments, which were started before I arrived in Derbyshire and were continued without any alteration or amendment by myself to the end of the period for which they had been intended to run. The results were returned to my office, and I stated them precisely as they were returned. Following the publication, the same critic in the same journal in which his panegyric appeared, stated that the experiments "for the absence of controls and other reasons were absolutely valueless." I may remark that the experiments at Rochester, U.S.A., and Cumberland were also without controls, yet they were commended by him. However, this change of front suggests the question: How can you have controls when you have broadcast iodine via the water supply of a whole community? The technique was not mine, but was that of those who claim to be authorities on the administration of iodine, and authoritatively recommended its broadcast use in the public press, and this critic was one of the leaders.

There is another point which I feel it a duty to myself to raise, and it is to answer comments made by the same critic, in a newspaper article published April 10th, 1926, viz.—“Evidently Dr. Ash, the new County Medical Officer of Health, is no believer in its (Iodine’s) efficacy as a preventive of Goitre. But then, a few years ago his predecessor, Dr. Barwise, was just as sceptical. We had many discussions on the subject I supplied him with arguments and literature, and he studied the subject for himself, with the result that, instead of being a doubting Thomas, he became an enthusiastic evangelist. It is not too much to say that, but for his lamented death, Goitre in a few years would have become but a memory, and the name ‘Derbyshire Neck’ would have lost its significance.”* In reply to this I will quote from the last report of Dr. Barwise on this subject, dated December 5th, 1924, i.e. shortly before his death, which I have had brought to my notice recently, in which he wrote **“Owing to the publicity which has been given to this question, there is a real danger of salts being put on the market and being sold as ‘Iodised Salt,’ which contain an excessive amount of iodine, so much so as to be detrimental. The amount of iodine which different manufacturers are putting into salt varies considerably, and the estimation of the amount of iodine in these small quantities of table salt is an extremely difficult analysis.”** Later in the same report, he wrote **“I have spent a considerable time looking up the processes of analysis of iodine, and I can find no processes by which the iodine present in our drinking waters can be estimated.”** From this the reader can judge how far my opinions differ from those of Dr. Barwise at the time of his death. He may have been persuaded by literature and arguments that iodine was worthy of a trial, but before his death he had put on record that he had come to appreciate its dangers by that much more valuable means to knowledge—experience. This is my whole point, as I have said before—the danger of indiscriminate administration of iodine—and my predecessor was of the same way of thinking after he had studied the subject for himself, whatever literature and arguments had done for him previously. Further, it should be noted that he too had come to the conclusion that it was no simple matter to estimate deficiency or excess of iodine, and it must be concluded from this that he could no longer have advocated the broadcast administration of iodine to normalise an intake which there were no sound reasons to believe was deficient. I therefore think I may say that my critics prophecy is based on as unsound grounds as were his efforts at broadcast administration of iodine.

Recent results with Iodine outside Derbyshire. It has been said that Derbyshire is the only place where adverse results have been obtained. That is not a fact. If anyone interested will discuss the matter with medical men who have used iodine, they will get ample evidence that adverse results are by no means confined to this County. From time to time workers on the subject publish their results. The Derbyshire results have been compared particularly with the results obtained in America.—Dr. C. L. Hartsoek of Cleveland, America, has been led to doubt the advisability of the

*See last paragraph of page 132.

general use of iodised salts by observing a large number of cases of hyperthyroidism amongst middle aged men and women who have been taking iodine. This is one of the great dangers. An adenoma of the thyroid is all too prone to become a toxic adenoma after 15 or 16 years without aiding and abetting it to do so by the administration of iodine. Again, from reference to "Public Health Reports Distribution of Endemic Goitre in the United States as shown by Thyroid Surveys," vol. xli., No. 48, it is learnt that the difficulties met with in this County are the same as those in America. The following are the comments on these reports made in "The Lancet" of February 12th, 1927 :—

"So variable have been the reports from different places, that it remains difficult, for example, to decide whether the general administration of iodine to school children in goitrous areas is desirable. In the Central States, as in other parts of the world, this measure is said to give good results, and it can hardly be thought unreasonable where its aim is merely to raise the intake of iodine to a normal level. The results, however, are conflicting, and in any case it is unwise in this country to encourage the wholesale use of iodised preparations, some of which certainly contain far more drug than the body normally requires. In the wise words of Dr. Donald Guthrie, of Pennsylvania, 'the public should be warned of the great danger in the self-administration of iodine for the treatment of goitre, and physicians should have a clear understanding of the types of goitre that are amenable to the iodine treatment, and of the danger which attends its incorrect use.' Instead of this we see articles in the lay press and notices in chemists' shops instructing people to regard iodine as a general tonic, and especially as a preventive or cure for goitre."

The remark of Dr. Donald Guthrie, quoted above, is not very different from the concluding remarks in my report for 1925, where I said, "It is equally common knowledge that the administration of iodine is by no means good and may even be dangerous in other stages or types of goitre, and I wish to stress the need for a more discriminate use of the drug."

D. Maselli (Il Policlinico, Sez. Med. November 1st, 1926, page 565) points out the contra-indications of iodine treatment in cases of exophthalmic goitre, and also the unsuitability of iodine in toxic adenoma.

In the last three reports of the Metropolitan Water Board, Dr. Alexander Houston has advocated caution in considering the iodisation of water supplies.

It appears, therefore, that Derbyshire is by no means the only area in which the dangers of iodine have been appreciated.

It is dangerous to recommend the indiscriminate use of iodine, either for treatment or prophylaxis, in the public press. The vast majority of the general public will not be interested, and amongst those who will are those suffering from one or other of the different varieties of goitre in which iodine is harmful. Nor will it very much

remedy matters by pointing out that the use of iodine by such means as iodised salt is a prophylactic, for those chiefly interested will be sufferers from goitre who are looking for some cure, and it is to these that the danger is the greatest.

There are undoubtedly types of goitre entirely unrelated in origin to iodine. R. McCarrison reports on one such type in "The Lancet" of April 30th, 1927. Last year, I said "whether iodine deficiency may be a possible cause or not it is difficult to say, but I am of opinion that if it is an occasional cause, such occasion is, in all probability, very rare." I have found no need to alter the statement. "The Lancet" of November 13th, 1926, referring to my report, stated as follows:—

"It might seem, on the face of it, a curious proceeding to give the whole of a community iodine because a certain number of its members suffer from goitre, or to give a whole family iodised salt in order that one member may benefit, but it is reasonable to normalise the intake of iodine in a community where there is reasonable suspicion that many members are suffering from its deficiency."

I entirely agree. However, I pointed out, in referring to estimations of iodine in food, water and soil, that "I am sceptical of the accuracy of such analyses in the hands of anybody but those who have made a special study of it." If that statement required amendment it would be to the effect that the experience of the last year has taught me to be sceptical of the accuracy of all such results, even if obtained by those who have made a special study of it. Later I shall give the results of certain estimations carried out in this County during the year, and all I will say for them is that they are as accurate as you can get them, and in many cases they have been checked and cross-checked by various chemists. It was this process of checking and cross-checking which has made me more rather than less sceptical. This being so, it is extremely difficult to be 'reasonably suspicious' that members of the community are suffering from iodine deficiency. The only guide appears to me to be to give iodine and watch its results. If iodine does good it may be that there is a deficiency, but not necessarily so. However, this method precludes the broadcast administration of iodine. It is therefore apparent that I stand where I stood last year, and I find no reason to amend the statements made in my report for 1925.

The work done in Derbyshire during 1926.—During 1926 further experiments were carried out by one observer, viz.:—Dr. Philip H. J. Turton, who also carried out the observations in 1925, at the invitation of my predecessor, and the results are set out hereunder. The experiments were carried out in six schools in the Heanor area. All the children were examined with a view to classification as to whether they were goitrous or normal by inspection. In the case of the goitrous children all the necks were measured from the tip of the 7th cervical spine behind, to a point in front at the level of the cricoid cartilage. Both the goitrous and the normal children were divided into two groups, one group of each receiving iodine and the second group of each acting as controls. The method of

administering the iodine was to give each treated child one sweet per week for varying periods, each sweet containing the equivalent of 1/10th grain of iodine, the actual drug being Sodium Iodide. All sweets were freshly prepared and examined for their iodine content before administration—I have a written guarantee from the manufacturers, one of the most reputable firms of Chemists in the country, that the sweets contained the stated amount of iodine. The period for which the sweets were given will be mentioned in connection with each school. At the end of the experiments the same children, both goitrous and normal, were re-examined, and the necks of the goitrous children re-measured. In this latter connection an allowance had to be made for natural increase in the size of the neck according to the length of time between the two measurements. For six months an allowance of 1 centimetre was made for natural increase in the size of the neck, and for 12 months $1\frac{1}{2}$ centimetres. It should be pointed out that when the final examinations and measurements were made, the observer, Dr. Turton, was not informed whether each individual child had been receiving treatment or not. Children who left school before the experiments were completed are not included in the figures. The results obtained at the different schools were as follows:—

Loscoe Road School (Girls).

Total number examined 264 (8-13 years of age).

<i>Goitrous</i> 100.			<i>Treated.</i>		<i>Untreated.</i>	
			<i>No.</i>	%	<i>No.</i>	%
Unchanged	...	...	19	31.7	7	17.5
Increased	...	...	22	36.6	14	35.0
Decreased	...	...	19	31.7	19	47.5
			—		—	
			60		40	
			—		—	
<i>Normal</i> 164.						
Unchanged	...	...	78	84.8	58	80.6
Increased	...	...	14	15.2	14	19.4
			—		—	
			92		72	
			—		—	

At this school each treated child received one sweet per week for 8 weeks commencing in March, and similar treatment for a further period of 8 weeks commencing in September, 1926, the total iodine equivalent for the whole experiment being 1.6 grains. Of the 38 children whose goitres decreased, in 24 cases the goitre disappeared altogether. Of these 24, 12 had been treated and 12 were untreated.

Sedgewick Street (Girls).

Total number examined 239 (8-13 years of age).

<i>Goitrous</i> 97.			<i>Treated.</i>		<i>Untreated.</i>	
			<i>No.</i>	%	<i>No.</i>	%
Unchanged	...	...	9	13.8	3	9.4
Increased	...	...	35	53.9	14	43.7
Decreased	...	...	21	32.3	15	46.9
			—		—	
			65		32	
			—		—	

Normal 142.

Unchanged	...	...	65	80.3	50	82.0
Increased	...	...	16	19.7	11	18.0
			—		—	
			81		60	
			—		—	

In this school each treated child received one sweet per week for each week of the school year, and in all each child received an equivalent of 4.4 grains of iodine.

Heanor Secondary Schools (Girls).

Total number examined 96 (10-17 years of age).

			<i>Treated.</i>		<i>Untreated.</i>	
<i>Goitrous 38.</i>			<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Unchanged	...	...	9	42.8	8	47.1
Increased	...	...	8	38.1	4	23.5
Decreased			4	19.1	5	29.4
			—		—	
			21		17	
			—		—	

Normal 58.

Unchanged	...	...	22	68.8	19	73.1
Increased	...	...	10	31.2	7	26.9
			—		—	
			32		26	
			—		—	

At this school each treated child received one sweet per day for two periods of 5 weeks each, commencing in May and September, 1926. The equivalent amount of iodine each child received was 5 grains for the whole experiment.

High Street School (Girls).

Total number examined 64 (8-10 years of age).

			<i>Treated.</i>		<i>Untreated.</i>	
<i>Goitrous 16.</i>			<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Unchanged	...	...	2	22.2	4	57.1
Increased	...	...	4	44.4	1*	14.3
Decreased	...	...	3	33.3	2	28.6
			—		—	
			9		7	
			—		—	

Normal 48.

Unchanged	...	...	22	84.6	21	95.4
Increased	...	...	4	15.4	1	4.6
			—		—	
			26		22	
			—		—	

At this school each treated child received one sweet per week for two periods of 8 weeks each, commencing in May and September, a total equivalent amount of iodine of 1.6 grains.

*A large goitre with marked hypothyroidism; the parents refused permission for treatment.

Langley Mill School (Boys).

Total number examined 262 (8-13 years of age).

			<i>Treated.</i>		<i>Untreated.</i>	
			<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
<i>Goitrous</i>	95.					
Unchanged	...	...	32	38.6	2	16.6
Increased	...	...	23	27.7	5	41.7
Decreased	...	...	28	33.7	5	41.7
			—		—	
			83		12	
			—		—	
<i>Normal</i>	167.					
Unchanged	...	...	140	94.0	16	88.9
Increased	...	...	9	6.0	2	11.1
			—		—	
			149		18	
			—		—	

At this school each treated child received one sweet per week for two periods of five weeks each, commencing in May and September. The untreated children were those whose parents refused permission for the children to have sweets. In the case of the normal children who were treated, 6 developed goitre at 12 years of age.

Codnor Mill Lane (Girls).

Total number examined 11 (12-13 years of age).

			<i>Treated.</i>		<i>Untreated.</i>	
			<i>No.</i>	<i>%</i>		
<i>Goitrous</i>	5.					
Unchanged	...	...	—	—
Increased	...	...	4	80.0	Nil.	
Decreased	...	...	1	20.0		
			—			
			5			
			—			
<i>Normal</i>	6.					
Unchanged	...	...	5	83.3	Nil.	
Increased	...	...	1	16.7		
			—			
			6			
			—			

Each child received one sweet per week for two periods of 8 weeks each, commencing in May and September.

Codnor Mill Lane (Boys).

Total number examined 9 (12-13 years of age.)

			<i>Treated.</i>		<i>Untreated.</i>	
			<i>No.</i>	<i>%</i>		
<i>Goitrous</i>	6.					
Unchanged	...	...	1	16.7		
Increased	...	...	1	16.7	Nil.	
Decreased	...	...	4	66.6		
			—			
			6			
			—			

Normal 3.

Unchanged	3	100.0	Nil.
Increased	...	...	—	0.0
			—	3*	

Each child received one sweet per week for two periods of 8 weeks each, commencing in May and September.

All the children were photographed before and after treatment but we have decided that this method of recording results is entirely unsatisfactory, and in any future work it will not be continued.

From the above figures it would appear that iodine in small quantities has no appreciable effect, yet that iodine *in small quantities* would have a marked effect in the prevention and also in the cure of early cases of goitre was the main point of the iodine deficiency theorists.

If the goitres met with in children were due to a deficiency of iodine, remembering that the intake of iodine of any individual is very small, then one would expect the giving of a small quantity to have the desired effect, but it is not so. In fact, as shown in my report of last year, and also to some extent in the figures given above, iodine tends to increase thyroid enlargements in school children in a large percentage of the cases. That iodine in larger quantities will have a curative effect in certain forms of goitre is a known fact, but iodine given in such quantities, either as a curative or as a prophylactic, should be given only under direct medical supervision, either in ordinary practice or in clinics.

Scott Williamson and Innes Pearse have pointed out that iodine given experimentally to animals increases the secretory activity of the gland and exaggerates this "hypertrophy and hyperplasia" particularly at the critical period of puberty when secretory activity is normally at its height. In his original observations Marine demonstrated the same fact, viz.: that the original hyperplasia of the thyroid is not banished by the use of iodine, and these results have been confirmed by the experiments in Derbyshire both in 1925 and 1926.

The available evidence goes to show, as I stated last year, that endemic goitre is closely related to water supplies, and that it is some substance in the water, and not any substance lacking from it, which is the cause.

Prevalence of Childhood Goitre in Derbyshire.—I had hoped that during 1926 it would have been possible to examine the majority of the children of the ages of 8 years and upwards, throughout the

*In addition to these, 4 other boys were treated for the first period only, leaving school at the end of that period. All were unchanged.

County, but time did not permit. However, a very large area of the County was covered, and includes practically the whole of the County to the west of a line drawn from Hatfield to Alfreton, leaving the north-east and an area around Swadlincote unexamined. In this investigation a total of 11,338 children aged 8-13 years were inspected. All the inspections were made by Dr. Philip Turton, and though I was present at many of the examinations, all cases were seen by him and he decided on the final classification. The classification was as stated in last year's report, viz :—

1. *Normal*—where no enlargement of the thyroid is seen either on inspection or palpation.
2. *Incipient Goitre*—where the isthmus is either felt as a small thickened band or seen especially on deglutition.
3. *Small Goitre*—where the enlargement causes alteration of contour of the neck detected on inspection or palpation of the isthmus or one or both lobes.
4. *Medium Goitre*—where the enlargement causes lateral or anterior bulging, producing deformity obvious on superficial inspection.
5. *Large Goitre*—those excessively enlarged and obvious on casual inspection.

Classifying the above groups as Incipient Goitre=X; Small Goitre=XX; Medium Goitre=XXX; and large Goitre=XXXX; the results show that of 5,809 girls examined 465 (8.0%) were XX or over, whilst 114 (1.96%) were XXX or over. Of the 5,529 boys examined, 221 (3.99%) were XX or over, and 33 (.59%) were XXX or over. From the definitions given above, it will be seen that less than 2% of girls and less than .6% of boys had obvious visible thyroid enlargement.

These figures are of marked importance as the personal factor is entirely eliminated, and it is the only example to my knowledge of such a large area being covered by one observer.

It is difficult to divide the figures into parishes on account of the small numbers examined in some of the more rural areas. For instance, Bradbourne, where 16 children were examined, showed there were 10% of boys goitrous and no girls, with an average of 6.2% of boys and girls together who were XX or over. No conclusions could accurately be drawn from such a small number, and the massing of the parishes together into Sanitary Districts is an artificial means of grouping the children, for the Sanitary Districts are made up of parishes irrespective of such factors as sources of water supply, geological formation, hardness of water, etc., all of which factors were investigated in many instances. However, taking parishes in which over 50 children were examined, one outstanding feature appears, viz :—that where the percentage of goitre amongst school children of the ages examined was high the source of the water supply was usually springs in the limestone; and where the percentage was low, the supply was from springs

in the millstone grit. It was therefore decided to divide the children into two groups (1) those who obtain their water from millstone grit; and (2) those who obtain it from the limestone. The results obtained by this means are as follows :—

	BOYS.					GIRLS.				
	Total Exam-ined.	No. XX or over.	Per cent age.	No. XXX or over.	Per cent age.	Total Exam-ined.	No. XX or over.	Per cent age.	No. XXX or over.	Per cent age.
Millstone Grit	1,298	44	3·4	4	0·3	1,598	101	6·3	19	1·2
Limestone ...	536	32	6·0	7	1·3	617	82	13·3	20	3·2

From these figures it appears that in the County as a whole, just as in the individual parishes, there is about twice as much goitre amongst children who receive water from the limestone as amongst those who receive water from the millstone grit.

In 1924, at the request of the Board of Education, a return was made of the number of goitrous school children at the age of 12 throughout the country. Recently those figures have been published by Dr. J. M. H. Campbell. I will refrain from commenting on them myself, but I will quote from the " Medical Officer " of June 18th, 1927, as follows :—

" Three sentences sum up the situation. The goitre rates amongst school children and the death rates from exophthalmic goitre are nearly identical in their geographical distribution : both tend to increase from east to west, and both reach their maximum in the Cornwall-Devon peninsular. Most students of goitre expected the first, but not the last two, which throw great suspicion on the theory that iodine deficiency is the primary cause of goitre. For what part of England should contain more Iodine than Cornwall, which is all coast ? Derbyshire has not a high goitre incidence."

Incidentally, the figures commented upon in Dr. Campbell's report, *viz.*—5·15% for boys and 11·87% for girls, were returned to the Board of Education long before I got to Derbyshire, and the figures which I have given above for children of 8–12 years of age tally very well with those returned for children of 12 years of age in 1924.

Although I have refrained from commenting on Dr. Campbell's report, I cannot refrain from referring to the statement quoted at the beginning of this Section to the effect that in a few years the name of Derbyshire Neck would have lost its significance, and my comment here will be that it has already done so. In my Report for 1925 I mentioned that in Dr. Barwise's School Report for 1909 he stated that goitre was diminishing in practically all districts, and that the diminution was, in his opinion, due to a better water supply. Again I am in agreement with my predecessor.

Time did not permit the investigation of the water supplies of the 11,338 children examined, but investigation was made in the case of children attending 50 different schools. Again, places were found where children were receiving water from mixed sources, and these were not included. The investigation of the water supplies of the remaining areas is still continuing.

Another series of investigations as to the iodine content of Derbyshire water supplies and the percentage incidence of goitre amongst school children were made. These results, as far as they have been worked out, are shown in the following Table.

TABLE 1.

TABLE OF IODINE CONTENT OF DERBYSHIRE WATER SUPPLIES, AND % INCIDENCE OF GOITRE.

<i>Place.</i>	<i>Source of Water.</i>	<i>Iodine in parts per 10,000,000.</i>	<i>Hardness in ° Clark.</i>	<i>Goitre % Boys & Girls, excluding Incipients.</i>
Atton	Derwent Valley & coal measures (borings)	·089	7·0° & 4·0°	6·4
Bourne	Bunter Sandstone (borings) ...	·049	17·6°	5·1
Bakewell	Millstone Grit Springs ...	·058	3·0°	2·3
Bow	Springs in Limestone through grit	·26	3·0°	6·4
By	Same as Bakewell ...	·058	3·0°	7·1
Er	Springs in Millstone grit ...	·115	20·0°	6·6
Hall	Springs in Limestone and Basalt	·045		3·1
ington	Well in Limestone ...	·013		21·7
terfield	Moorland, and borings in coal measures	1·0	8·5°	(Not yet examined)
Cross	Borehole and springs in Millstone Grit	·078	8·6°	2·84
ington	Moorland Surface (coal measures)	Nil.	4·6°	(Not yet examined)
all	Well in Trias ...	·15		7·9
sop	Moorland surface (Millstone Grit.)	·0085	3·0°	2·7
nor	Springs in Limestone ...	·08	8·7°	33·3
ton	Springs in Millstone Grit ...	·06		33·3
g Eaton	Springs in Millstone Grit ...	·15	16·0°	8·0
Bourne	Springs in Millstone Grit ...	·15		10·0
land	Moorland surface, coal measures ...	Nil.	4·0°	7·73
bury		·069	—	1·6
ksworth	Springs in Millstone Grit ...	·045	7·5°	15·0
ley	D.V. and coal measures ...	·086	3·6	4·6

The number of waters examined for iodine content is not sufficient for me to draw any definite conclusions, however, from the results obtained an effort was made to draw some form of graph, but it was found impossible to get the figures to fit in to any specified curve. Another reason why no conclusion has been drawn from these figures is because, as I have already stated, I am sceptical of all these quantitative analyses for iodine in such small quantities. However, I have learnt this from the analyses; that the goitre in Heanor cannot be accounted for by lack of iodine in the water, and, further, the large amount of goitre which I am told by my critics exists in Chesterfield cannot be said to be due to lack of iodine, for the Chesterfield water was one of the richest in iodine.

A further investigation consisted of the examination of soils for iodine content. 84 different soil samples were investigated from various districts, and I do not intend to burden the reader with details of each sample, but have classified them accordingly to the six geological formations from which they were taken. The results are set out in the following Table, which shows the average iodine content of these soils.

<i>Geological Formation.</i>	<i>Average parts of iodine per 10,000,000.</i>		
Basalt Soils	26
Limestone Soils	59
Limestone Shale Soils	10
Millstone Grit Soils	4
Gritstone Soils	18
Coal Measure Soils	16

One point here should be noted, and that is that the millstone grit soils contain an extraordinarily small proportion of iodine, and yet in areas where the water supply comes from the millstone grit, goitre is less common than elsewhere. This tallies with the findings of McCarrison in his experiment at the Lawrence Military Asylum, Sanawar, India, where to combat goitre the water supply was changed. The result was a marked success, but examination of the old and new supplies by three independent chemists showed that the new water supply contained less iodine than the old supply. McCarrison also found that amongst 1,000 European school children at Coonor there were no less than 23% of them with incipient goitre, whilst the soil of the locality was exceedingly rich in iodine, containing as much as 400 parts per 10,000,000. In Derbyshire goitre is more prevalent on soil rich in iodine than on soil poor in iodine.

I have been able to give results of the examination of over 11,000 children by one observer. The figures obtained can therefore be considered accurate, bearing in mind the absence of the personal factor present when more than one observer carries out examinations. The analyses for iodine are, I believe, as accurate as chemistry can make them, and therefore allowing that my scepticism is unwarranted there would appear to be no connection between the iodine content of the water supply and the incidence of goitre in the same area. With regard to iodine in soils, the futility

of research in this connection in this country is apparent to almost everyone, for in the case of virgin soils no food is grown on it, and it has not come to my knowledge that the soil itself is a staple form of diet in any part of the County. With regard to cultivated land, all such land is manured, and how much iodine has been added to it in this way it is impossible to say; but even if it were possible, the people of any one area do not depend for even a quarter of their food on local produce. Further, if they did, the plants grown would not contain an increased amount of iodine however much the soil iodine was increased, as the Hohenheim experiments have proved. When the investigations covering the whole County have been completed, I hope Dr. Turton will publish the results fully in some medical journal. By far the major portion of the work has fallen to him, and I should like to take this opportunity of expressing my appreciation of his valuable assistance. He is in full agreement with the conclusions drawn from the experiments. In the 1925 experiments he was not responsible for the technique adopted, his function being solely to record the findings and return them to this office, but in 1926 we collaborated in the formation of the experiments.

Bacterial pollution of water.—A commencement was made in an investigation of the relation of goitre to bacterial content of water, and the data so far obtained is given in Table 2. A vast field opens out here, and the work done in 1926 is insufficient to allow of any attempt at drawing conclusions. In fact, a commencement has hardly been made. The *Bacillus Coli* was taken as an indicator, but I am already beginning to see that a wholesale investigation of water for *B. Coli* is not likely to lead us anywhere. It appears to me that the form of research required is something on these lines: first isolate definitely goitrous villages, or even families in different localities, and then go thoroughly into all the circumstances which may have a bearing on their goitrous condition, such as diet, infection, either by water or otherwise, chemical properties of the water supply, and a very detailed bacteriological examination of the water, always bearing in mind that the causative agent may be some form of bacterial or plant life previously unsuspected or even unknown to exist. Whether time will permit this type of research in this County I cannot say, but I am afraid not as things stand at present. Also, these researches cost money, and practically all the costs of the work done in this County during 1926 has been borne privately.

Conclusion.—In conclusion, may I repeat that the investigations carried out in 1926 have not lead me to alter in any way the opinions expressed in my report for 1925, viz:—that I do not consider lack of iodine is the cause of goitre, nor do I consider it possible at present to prove the presence of “iodine starvation.” The administration of iodine, which has again become the vogue amongst a certain small group, is nothing but a repetition of a past fashion. It has been said that the history of medicine is after all a story of outlived fashions, which usually do no harm to the health of the patient. Unfortunately Iodine does not fall in with this rule—it may do considerable harm as I have shown.

TABLE 2.

SHOWING B. COLI CONTENT OF WATER-SUPPLY, AND PERCENTAGE
INCIDENCE OF GOITRE IN SCHOOL CHILDREN.

<i>Place.</i>	<i>B. Coli Content.</i>	<i>Goitre % Boys and Girls Excluding Incipients.</i>	<i>Geological Formation.*</i>
Alport (Old Supply)	Present in 3 c.c. ...		C.L.
Ashford	Present in 150 c.c. ...	2.5	M.G.
Bakewell	Present in 1 c.c. ...	2.3	M.G.
Beeley (Old Supply)	Present in 0.1 c.c. ...	7.1	M.G.
Do. (New Supply)	Present in 1 c.c. ...		L.S.
Bonsall	Present in 3 c.c. ...	3.1	C.L. and V.
Bradbourne	Present in 150 c.c. ...	6.2	L.S.
Bradwell	Present in 10 c.c. ...	5.6	L.S.
Calver	Present in 150 c.c. ...	25.0	M.G.
Chelmorton	Present in 150 c.c. ...	6.0	C.L.
Cromford	None in 150 c.c. ...	5.8	M.G.
Elton	Present in 2 c.c. ...	15.1	C.L.
Eyam (Town End) ...	Present in 50 c.c. ...	9.6	L.S.
Eyam (Trough) ...	Present in 50 c.c. ...		L.S.
Great Longstone ...	Present in 150 c.c. ...	5.4	M.G.
Hognaston	None in 150 c.c. ...	17.2	L.S.
Middleton-by- Wirksworth	None in 150 c.c. ...	11.9	C.L.
Monyash	Present in 3 c.c. ...	11.4	C.L.
Sheldon	Present in 150 c.c. ...	6.6	C.L.
Stoney Middleton (Old Supply)	Present in 1 c.c. ...	11.7	C.L.
Stoney Middleton (New Supply)	Present in 150 c.c. ...		M.G.
Taddington	None in 150 c.c. ...	4.4	M.G.
Ticknall	None in 150 c.c. ...	16.4	C.L.
Tideswell	Present in 1 c.c. ...	7.9	C.L.
Tissington	None in 150 c.c. ...	8.3	C.L.
Turnditch	None in 150 c.c. ...	Nil.	
Wirksworth	None in 150 c.c. ...	15.0	M.G.
Youlgreave	None in 150 c.c. ...	5.6	L.S.

*C.L.=Carboniferous Limestone.

M.G.=Millstone Grit.

L.S.=Limestone Shales.

V.=Volcanic.

P.S.—Whilst this report was in the hands of the printer, I received information from New Zealand that the Health Departments of the Legislative Council had issued a public warning as to the dangers of the indiscriminate use of Iodine, and are forming regulations requiring manufacturers to place on all packages containing goitre remedies a label stating the ingredients with a caution that the medicine is “not to be taken unless under medical supervision.” I am informed that these steps were taken on account of the marked increase in toxic goitre resulting from the indiscriminate use of Iodine in that country. The Legislative Council are to be congratulated on their action.

APPENDIX II.

SILICOSIS IN DERBYSHIRE.

*By**P. Heffernan, B.A., M.B., B.Ch., B.A.O.,**Tuberculosis Officer.*

“Pneumokoniosis” is a Greek term, coined by Zenker, to denote the condition produced in the lungs of men and animals by the inhalation of dust, and “Silicosis” is the special variety of that condition produced by the inhalation of silica dust, i.e. particles of free silica (Si.O_2) in very fine sub-division, for, strangely enough, the dust of pure silica is infinitely the most harmful of all inorganic dusts, when inhaled into the lungs, apart of course from direct poisons like arsenic, lead or mercury.

It is only within recent years that this fact has been generally recognised. It is now known that the dust of soft coal, in infiltrating the lungs of miners and producing the condition known as “anthracosis” causes little inconvenience to the individuals affected. The dust of chalk, gypsum, oolite or Bath stone, marble, limestone and the whole calcareous group, is comparatively harmless. When signs of pulmonary dust fibrosis occur in limestone workers, it will usually be found that there are veins of silica rock, *e.g.* chert or flint, embedded through, or associated with, the limestone. In certain coal mines, men working at the coal face develop in time a moderate “miner’s asthma”; and here, again, it appears to be the silica rock overlying or surrounding the coal seams which is the causative agent. Argillaceous rocks, aluminates, such as those of Portland cement; hematite and other iron ores, clay, loam, earth, and soil dusts are in themselves comparatively harmless. In the cutlery trade, it is the dust from the sandstone and gritstone wheels, and not from the steel itself, which produces “grinders’ rot.” By employing carborundum, corundum and emery wheels, instead of silica grindstones, the incidence of this disease can be greatly reduced apart from the improvement due to the substitution of “wet” for “dry” grinding, and the prohibition of the dry “racing” of wheels.*

“Silicosis” is a progressive fibrotic change in the lung tissue, due to the inhalation and deposition in the lung parenchyma of fine particles of silica, leading to the destruction of the functioning lung substance and its replacement by fibrous tissue. It is characterised, clinically, by a steadily increasing dyspnoea, and by a tendency to develop and succumb rapidly to pulmonary tuberculosis, in late middle life.

Until quite recently, silica dust was supposed to produce its deleterious effect on the lungs mechanically, by wounding and cutting into the lung tissues. Silica particles are usually sharp and spicular, with a sharp vitreous fracture. They are hard, heavy and insoluble in acids, and it seemed reasonable to assume that the silica dust

*Since this paper was written, The Metal Grinding Industries (Silicosis) Scheme, 1927, has been issued by the Home Secretary.

produced pulmonary fibrosis by continuous mechanical injury with the consequent production of ordinary scar tissue.

Recent investigations, however have demonstrated with practical certainty that the pulmonary fibrosis is brought about in quite a different way, and that the mechanical injury plays quite a subordinate part in the production of typical silica fibrosis, and in lowering the resistance of the lungs to the activities of the tubercle bacillus. Without going too deeply into the pathology of the condition, it may be stated that it is now known that the action of the silica is a bio-chemical rather than a mechanical one, and that the silica particles have to be converted into a colloidal state before a true condition of 'silicosis' develops.

In investigating the question of the liability of workmen in any particular industry to silicosis, there are three main avenues of approach, viz :—

(1) The presence of silica dust in the atmosphere in which the operatives work ; and its amount and character, if present, may be ascertained by the use of accurate scientific instruments. The results obtained will enable a very fair *a priori* opinion to be formed as to the risk run by the individuals concerned. This work falls within the province of the Home Office.

(2) The occurrence of respiratory diseases amongst the operatives may be noted, and clinical and radiographic records kept.

(3) The vital statistics of those engaged in the industry may be analysed.

The two latter avenues of approach appear to lie within the domain of the Public Health Officer, and, as every case of silicosis is, *ipso facto*, a tuberculous suspect, the keeping of clinical and radiographic records will usually devolve upon the Tuberculosis Officer.

In this note, I shall attempt some exploration in avenues (2) and (3).

Silica, in various forms, occupies an important place amongst the mineral products of Derbyshire, and, as might be expected, Silicosis is, in certain parts of the County, a well-known disease.

The chief forms of silica found in Derbyshire, and utilised in industry, are (1) Millstone Grit ; (2) Pocket Silica Sand ; (3) Ganister rock ; and (4) Chert.

(1) *Millstone Grit*.—The best Derbyshire millstone grit may contain up to 98% of pure silica, and is one of the toughest and most durable of stones known to man ; being, in contradistinction to the older carboniferous rock, particularly resistant to the action of acids. For this reason it is very suitable for modern city architecture. As is well known, when the present Houses of Parliament at Westminster were being designed, it was proposed that Darley Dale millstone grit should be the material used. Other counsels prevailed, and a magnesian limestone was finally selected. The

result was what might have been foreseen. The limestone failed to resist the acids of the smoky London atmosphere, and at the present time considerable expense is being incurred in replacing the already decayed limestone by the millstone grit originally rejected. Similarly, the old pavement of Trafalgar Square is being replaced by Darley Dale stone. The same stone is extensively used for grindstones, and for pulping wheels in the manufacture of wood pulp, all over the world; the toughness of the stone being such that the massive pulping wheels can be revolved at a rapid rate, without, as I am informed, risk of fracture.

One would naturally expect that, in the absence of special precautions, considerable risk of silicosis would obtain in working a material with such a high content of pure silica, and, as is well-known the condition spoken of as the Derbyshire "Stone-mason's disease" or "Stone-mason's complaint," is typical Silicosis.

The late County Medical Officer of Health, Dr. Barwise, investigated this disease, and published a report on the subject in 1913. He took out the deaths from Phthisis during the ten years 1901-1910, amongst gritstone workers, limestone workers and agriculturists in the Bakewell Registration district, which includes the Darleys and Matlock; compared the numbers of these deaths with the number of males over 15 years employed in these industries during the same ten years, as shown by the census returns of 1901 and 1911; and arrived at the following conclusions:—

"(1) The death rate from Phthisis amongst gritstone workers is twenty times greater than in the same social class employed in agriculture, and seventeen times greater than in other workers."

"(2) The Phthisis death rate of workers employed in limestone is twice as great as that of other workers."

"(3) The rate amongst coal miners is about the same as amongst those employed in agriculture, and less than the average of other workers."

(This conclusion was drawn, of course, from figures *outside* the Bakewell Registration area).

"(4) The death rate from Phthisis amongst gritstone workers is so high that it accounts for the death rate of the general population on the gritstone area being over the average of England and Wales."

"(5) Whereas the death rate from Phthisis in the last 30 years has been rapidly falling, as far as there is evidence, it points to only an unappreciable fall amongst males in the area in which gritstone is worked."

"(6) That amongst gritstone workers 45% of all the deaths of workers above 15 years of age are from Phthisis, while 12% of the limestone workers and 7.4% of coal miners die from this cause."

In 1923, Dr. Barwise asked me to take out the deaths from Cancer in the Bakewell registration district, from the Superintendent Registrar's books at Bakewell, for the ten years 1911—1920, and deputed Mr. Pedley from the office to work with me. It appeared to me that I should make use of the opportunity to take out the deaths from Phthisis and pulmonary fibrosis amongst the gritstone workers at the same time and for the same period.

Furthermore, as regards Silicosis, another interesting development had taken place. The Workmen's Compensation (Silicosis) Act of 1918 had been put on the Statute Book, and a scheme had been put into operation under this Act, dealing with what are known as the "Refractories Industries" (*i.e.* industries engaged in the manufacture of siliceous and silica bricks, and retort, kiln, and furnace linings of various kinds), but not touching gritstone workers. Under this scheme, workmen in these industries were to be examined annually, and if found to suffer from silicosis, or tuberculosis with silicosis, were to be suspended from the industry, and compensated. The scheme did not include the gritstone workers, but it took in a local Derbyshire industry, the workmen in which had not previously been suspected of suffering from silicosis, namely, the manufacture of silica bricks from the peculiar silica sand which is found in pockets in the mountain limestone of the North West Derbyshire plateau.

As Tuberculosis Officer, the duty of examining most of these men fell upon me. Although the actual brick works concerned are situated in the Ashbourne registration district, about 80% of the workmen employed reside in the Bakewell registration district (as I found when completing their papers for examination) in the villages of Youlgreave, Monyash, Elton, Winster, Middleton and surrounding districts. I therefore determined to take out the deaths from phthisis and pulmonary fibrosis, if any, from the silica brickmakers as well.

The two brickworks whose workmen I examined annually from 1921 to 1924, employed in all 205 persons. Of these, about 160* lived in the Bakewell registration district, the remainder living in the village of Hartington and the neighbouring hamlets of Biggin and Heatcote. I could only find one death of a silica brickmaker from phthisis registered in the Bakewell books during the ten years 1911—1920, a man aged 30; giving, on the basis of 160 employees, an average annual death rate of 0·6 per thousand.

Amongst gritstone workers I found 19 men had died of "phthisis," 8 of "pulmonary fibrosis," and 1 of "hæmoptysis" during the same ten years in the whole of the Bakewell registration district. This would give, on the basis of the 1911 census of a total of 351 gritstone workers,† an annual death rate of 5·43 per 1,000 for phthisis alone, and 7·71 for phthisis and "pulmonary fibrosis" taken together, for the decade taken as a whole. For the second half of the decade the rates were lower than the first, *viz.* :—3·90 per thousand for phthisis alone, and 5·69 for phthisis and pulmonary fibrosis taken

* The actual number in 1922 was 165.

† Dr. Barwise's Figures.

together. The phthisis death rate for Derbyshire for males over 15 during the same five years (the figures are not available before 1916) is 1.03 per 1,000. No death from phthisis was registered amongst the 160 silica brick makers during the same five years.

These figures are very much lower than those of Dr. Barwise, and as far as they go point to a steady diminution of deaths from phthisis amongst gritstone workers.

My figures, however, may not represent the true death rate amongst gritstone workers during the decade, as during the war a great number of the gritstone quarries were closed down, and the average number of men employed probably fell considerably below 350 for most of the time.

The average age at death was 49.5 for "phthisis," and 56.1 years for "pulmonary fibrosis." This late age at death is typical of silicotic phthisis.

DISPENSARY RECORDS.

The Matlock Tuberculosis Dispensary was opened in 1914, the Chinley Dispensary in 1915, and the Ashbourne Dispensary in 1921. Up to December, 1926, 25 gritstone workers had been admitted as patients at the Matlock Dispensary, 3 at Chinley and 1 at Ashbourne. Of these 29 cases, tubercle bacilli were present in the sputum of 19, of whom all but three are now dead. Of the 10 cases whose sputum was free from tubercle bacilli, 8 are still living.

Radiographs were taken in 17 cases, including 5 cases whose sputum was free from tubercle bacilli. Several of these radiographs have been reproduced in Medical Journals as typical examples of silcosis, or silicosis with tuberculosis. All have been preserved and, with the case records, are available for inspection or study.

The average age of the cases, on admission, was 46.5 years for those with tubercle bacilli present in the sputum, and 47.1 years for the cases whose sputum was free from the bacillus. A note was made of the time spent in the industry in 22 cases, and the average duration of employment works out at 25.8 years.

Of the cases admitted, 19 were bench hands (masons or stone cutters), 4 were "scabblers and scutchers" (dressing stone with pick and hammer), 4 were quarrymen, 1 a quarry foreman, and 1 a crane driver. In tabular form:—

		T.B. +	T.B. —
Number of cases admitted	... ..	19	10
Average age on admission (years)	... ..	46.5	47.1
Average duration of employment in gritstone industry (years) (21 cases only)		26.1	24.3
No. dead on 31-12-26	... ..	16	2
Occupations:—			
Masons and Stone Cutters	... ..	12	7
"Scabblers and Scutchers"	... ..	3	1
Quarrymen	... ..	4	—
Quarry Foreman	... ..	—	1
Crane Driver	... ..	1	—

As regards date of admission, 6 were admitted in 1914, 2 in 1915, 3 in 1916, 2 in 1918, 2 in 1919, 4 in 1921, 2 in 1922, 3 in 1923, 1 in 1924, 2 in 1925, and 2 in 1926.

Of the 18 deaths amongst dispensary cases which occurred during the 13 years, 16 were in Matlock patients. If we take the total numbers of gritstone workers in the Matlock Dispensary district as 350 (a liberal estimate, as shown above) we get an annual death rate, over the 13 years, of 3.52 per 1,000 from phthisis and silicosis, and 3.08 per 1,000 from pulmonary tuberculosis, in workers in this industry, *from dispensary figures alone*. But it is well known that there are a certain number of cases, although a steadily diminishing number, who do not attend the tuberculosis dispensaries, or come under the notice of the Tuberculosis Officer, so that the real figure is higher than this. There is, therefore, every reason to believe that the figures shown by the Bakewell registers for the 20 years 1902—1921, are accurate; and that, although the death rate from pulmonary tuberculosis amongst Derbyshire gritstone workers has fallen rapidly during the past thirty years, it is still at least three times as high as that of adult males in Derbyshire generally, reaching a lofty peak in the period of life between 45 and 55 years.

These figures further illustrate the well recognised facts that while silicosis alone is not a lethal disease, and pulmonary tuberculosis, occurring *per se* in late middle life, is usually benign; the combination of silicosis and tuberculosis is deadly, the case death rate for the combination in the 16 Matlock cases being 90%.

In 1922, the Derbyshire Gritstone Quarry Owners' Association arranged privately to have their operatives medically examined, "with a view of discovering the incidence of phthisis amongst quarry workers and other stone workers." I am indebted to Mr. V. H. Cockerton, Secretary of the Association, for the loan of the medical reports for perusal.

In all, 332 workmen were examined by six different local practitioners, two of whom are also local Medical Officers of Health. Each practitioner appears to have examined the men in his neighbourhood. No radiographs were taken, and no mention is made of sputum examinations.

Five cases of silicosis and 7 cases of other lung disease were found, percentages of 1.5 for silicosis alone, and 3.61 for lung diseases generally. The average age of the cases of silicosis was 49.6 years, and the average duration of employment in the industry was 22.2 years. The corresponding figures for "lung trouble not silicosis" were 43.14 and 17.6 years respectively. In the case of 291 employees records of the ages and duration of employment in the industry are available. Of these, 13 were under 20 years of age, 58 between 20 and 30, 62 between 30 and 39, 84 between 40 and 49, 51 between 50 and 59, and 21 over 60 years of age. In two the age was unknown.

The records made in the case of the remaining 41 operatives, who formed the staff of one quarry, and amongst whom no case of silicosis or other lung trouble was found, with the exception of a

blacksmith," an elderly man who had some emphysema," and who is not included as a case of lung disease, have been mislaid.

It must be remembered that, without radiography, silicosis can be diagnosed clinically only when in an advanced stage, and it is to be regretted that radiographic methods were not employed in this private examination of Derbyshire gritstone workers.

(2) *Pocket Silica Sand.* I should now like to turn to the other very interesting local silica industry, viz:— the manufacture of silica bricks from pocket silica sand. The Annual Report for 1924 shows that 247 men and 15 women employed in the Refractories Industries were examined by the Tuberculosis Officers in that year under the 1918 Silicosis Scheme. Of these, 189 men and all the women were examined by me, and I can of course only speak for these.

In a rural district such as the Bakewell registration district of Derbyshire, where little change occurs during the passage of years, a well established tradition is not lightly to be disregarded. There is no doubt that, in this district, the popular tradition or belief is that gritstone cutting is a dangerous trade, while silica brick making is a healthy one. It must be remembered, however, that the gritstone industry has existed in Derbyshire from the time of the Norman conquest, if not from an earlier date; while silica firebrick making has been established for little more than half a century— too short a period for the formation of a tradition. Furthermore, the "Stonemason's disease" dates back to the insanitary working conditions of the past, while the refractory brick makers have had the benefit of modern sanitary knowledge and legislation almost from the beginning. Too much importance, therefore, should not be attached to the local tradition. Nevertheless, it was somewhat of a surprise when it appeared that the silica sand brick makers were brought under the Silicosis Scheme, while the gritstone cutters were left out. In other districts, however, such as the neighbourhood of Sheffield and in Wales, where the material used is crushed ganister stone, and not pocket silica sand, silica getting and silica brick making are very unhealthy industries. In my examinations of the brick makers a certain number of cases of silicosis were found. The previous history of the affected individuals revealed the fact that the great majority of them had formerly worked as gritstone dressers or gritstone quarrymen; some had left the gritstone industry because they were already getting "short in the wind," and there seemed little doubt that this condition was attributable rather to the stone dust than to the dust from the silica sand.

Thus, out of 176 males employed at one brickworks in 1922, 18 had formerly worked on millstone grit (14 for over five years, and one for as long as thirty years). The pulmonary condition of 8, or 44%, of these men was abnormal to ordinary physical examination, and one (the man who had worked in gritstone for thirty years) was obviously an advanced case of silicosis. Of the remaining 158 men, 20 ~~35~~, or 12.7%, showed signs of pulmonary abnormality, a percentage which is probably about that of a general (unselected) working class male population.

None of the women showed signs of pulmonary abnormality, although all worked indoors at the brick making machines.

What was the explanation of the comparative absence of pulmonary silicosis in the silica sand brick makers of Friden and Parsley Hay (a condition borne out by radiographic examination of suspicious cases) as compared with (i) gritstone workers, and (ii) the ganister brick makers of Sheffield and Wales? It could not be accounted for by the absence of dust. The clothes of the workmen, when beaten, emitted clouds of dust. The girls wear caps to keep the dust out of their hair. The hands of the men and women employed have the white appearance and silky feel characteristic of workers in dusty occupations. The most likely explanation would be that the dust was innocuous, and yet analysis of the material showed Silica 84.9 to 89.9%, or well above the "plimsol line," laid down by the Home Office authorities at 80%.

(It is necessary to point out, however, that this figure of 84.9% to 89.9% includes combined silica. The proportion of "free silica," or quartz, is considerably less. Mr. A. T. Green, of the British Refractories Research Association and a member of the Staff of one of the Derbyshire Silica brickmaking companies, informs me that a rational analysis of the silica sand would average:—Quartz, 78%; Micaceous matter, 7%; Clay, 15%.)

Derbyshire pocket silica sand is a peculiar material. Its geological position is still to some extent, or was until very recently, unsettled. One thing, however, is certain, viz:—it is quite distinct, physically and geologically, from ganister stone, which is hard, partially metamorphosed quartzite rock containing up to 98% of pure silica, found underlying the coal measures.* From the point of view of silicosis, therefore, it is necessary to draw the clearest possible distinction between the two materials.

The following description of Derbyshire pocket silica sand is taken from the special report of the Geological Survey (1920), Vol. vi, pp. 168-169:—

"The materials filling the pockets are uniform in character throughout the district, a pale grey, drab or white sandy clay "ganister" predominates, with this are associated white sands and beds or streaks of white or greenish-white highly plastic clay and pebbles of quartzite, vein quartz and sandstone . . .

"The purer white incoherent sands consist almost entirely of angular quartz of all dimensions from minute chips to grains of about 0.3 mm. Mica is not common, and felspar practically absent. There is nothing that can properly be styled argillaceous matter, *but each grain of quartz has a pellicle of kaolinitic material*†. . . In the less coherent sands (so called "ganister")

*The term "Ganister" would appear to be used commercially to denote many kinds of stone containing free silica. Of 5 specimens of commercial "ganister" in my possession, 2 are pseudomorphic quartzite from beneath the coal measures; 1 a clear quartzite unassociated with coal; 1 a flinty sandstone; and the fifth, supposed to be the most dangerous from the point of view of Silicosis, is a crystalline friable aggregate resembling loaf sugar and containing over 98% of Silica, unsuitable for brickmaking but used in the manufacture of abrasive soaps.

†The italics are mine.

which are less pure in composition and colour, the bulk of the material is quartz of similar character to that of the purer samples, but true argillaceous matter is more abundant, and mica and micaceous aggregates are conspicuous. A certain amount of kaolinitic material is present in these sands, also in about the same proportion as in the purer varieties.

“ The geological age of these deposits is indefinite, possibly post-Triassic and pre-Glacial. The cavities are such as are commonly formed in limestones by subterranean solution, and the nature of their contents points to both Triassic and Carboniferous sources for the sands, clays and pebbles.”

The most recent work on the geology and physics of Derbyshire silica sand has been done by Doctor Alex. Scott, [REDACTED] of the North Staffordshire Technical College. Dr. Scott has very kindly favoured me with the following note on the subject :—

“ The deposits of Silica and siliceous clay found in large pockets on the Limestone plateau of West Derbyshire have been the subject of considerable discussion. Earlier opinions describe their origin to material formed by the weathering of rocks originally overlying but which have now disappeared as the result of denudation, these rocks being especially Trias, and to a lesser extent, Millstone Grit. Alternately, they have been supposed to originate by the solution of the limestone, the sand and clay being the residual insoluble material.

“ A recent re-examination by the writer has clearly shown that the hollows represent underground solution cavities in, or near the surface of the limestone, and that the material has partly formed from “ washed in ” debris, but mainly through the collapse of the overlying strata consisting of shales and thin bands of sandstone of Pendleside age. This is proved by the occurrence of abundant Pendleside fossils, especially goniatites, in certain black clays, and by the curious arrangement of the deposits so far as bedding is concerned. The material therefore is mainly composed of rounded sand grains, often coated with clay, and clay material itself. Except at Ribden, in Staffs, there is no trace whatever of any Triassic material in the pockets, none of the pebbles showing the characteristic pitting in the Bunter pebbles.”

While the “ mechanical injury ” theory of silicosis held the field, one was inclined to attribute the comparative immunity of the pocket silica sand brickmakers to the rounded character of the sand grains as described above. After the work of Gye and Kettle, one had to look elsewhere for the explanation. Two attributes still differentiated the supposed comparatively harmless silica sand from the deadly crushed ganister rock on the other hand, and from the dust struck off the millstone grit on the other. In the first place, the silica sand contains about 15% of clay mixed with quartz sand grains coated with Kaolinitic material, and in the second place the individual particles of sand for the most part exceeded in diameter the 10 microns which is considered the maximum size for

particles capable of penetrating into the alveoli of the lungs. Provided that the grains of sand were not subjected to fracture in the process of manufacture, the dust particles evolved would retain the coating of clay when present, and would be no smaller in size than the sand particles. Furthermore, I am informed by Mr. Green that the greater part of the clay is associated with the finer particles, from which it would follow that the finer quartz particles carry a thicker clay coating, comparatively speaking, than the coarse ones.

The protective influence of clay against silicosis has already been noticed. Smith, W. S. and Collis, E. L. investigating the health of ganister brickmakers in Stirlingshire and at Elland in Yorkshire, in 1917, pointed out that the influence of silica dust (even when derived from the crushing of ganister rock) in favouring tuberculous infection is modified when the silica is mixed with certain clays. (Report on the manufacture of Silica Bricks, H. M. Stationery Office, 1917). The "protecting" of substances in minute subdivision by films of another substance is a well-known phenomenon in physics and bio-chemistry.

In some of the sand pockets, comparatively large quartz pebbles are found associated with the clayey silica, and machinery for pulverising these is sometimes installed; the resultant powder being used for brickmaking. Obviously, dust arising in this process is not protected with clay, and will contain much finer particles than those of natural silica sand. It may very well be that the under-mentioned cases of silicosis that have recently come to my notice in pocket silica sand brickmakers may be accounted for by exposure to this dust.

Five men engaged in the silica brick industry, suffering from tuberculosis, have been seen at, or in connection with, the dispensaries since 1923. In two of these cases, one of which has since proved fatal, there was well-marked silicosis (proved by radiography, and, in the fatal case, by post-mortem examination). In two others, both of whom are now well and working, the fibrotic changes in the lungs were considered to be attributable, to some extent, to silicosis. The fifth, a young man of 20, who had been in the industry for a few months only, was an ordinary case of apical tuberculosis, and showed no signs of silicosis. The two cases in which the silicosis was well-marked only came to my notice within the past six months, and go to show that the immunity from silicosis enjoyed by workers in this industry is a relative rather than an absolute one.

From the above, it is, I think, obvious that the influence of clay admixture in the silica industries now calls for experimental investigation. The best method of protecting workmen from risk of silicosis is the prevention of the formation and inhalation of silica dust. But if, in some industrial processes this should prove impossible, a second best alternative, such as the treatment of the siliceous material with a kaolinitic, argillaceous, or other protecting substance, is not to be despised.

(3) *Ganister Rock*. Ganister rock, a hard, close-grained, partially metamorphosed quartzite stone containing up to 98% of

silica, is mined or quarried in Derbyshire at Dore and Totley and near Ambergate, but the chief sources of the material are in the neighbourhood of Sheffield, in the West Riding of Yorkshire and in Wales. It is used for making refractory bricks, furnace linings, etc. There is no question as to the grave risk of silicosis to those engaged in mining and grinding ganister rock. Birmingham, writing in 1910 in the *Journal of the Royal Sanitary Institute*, gave the death rates for ganister miners and ganister grinders as 42.3 and 179.8 per 1,000 respectively—truly appalling figures. The total number of persons employed in Derbyshire in quarrying, mining and grinding ganister rock, and in making refractory bricks from the ground material, would appear to be about seventy. They all, of course, come under the Silicosis compensation scheme.

The percentage composition of the three materials, as taken from figures supplied by the manufacturers, is as follows :—

Contents of Sample.	Pocket Silica Sand		A	
	Factory	Factory	Gritstone	Ganister
	A	B	Company	Company.
	%	%	%	%
Silica ...	88.90	84.90	96.40	96.90
Alumina ...	7.42	9.88	} 1.30	1.04
Ferrie Oxide ...	0.16	0.19		0.64
Manganese, magnesium and tit. oxide ...	0.44	0.85	0.00	0.50
Soda ...	1.49	0.84	0.00	0.15
Lime ...	0.00	0.34	0.36	0.15
Water and loss ...	2.49	3.30	1.94	0.62

As combined silica enters into the composition of clay, the above figures exaggerate the proportion of *harmful* silica in the pocket silica sand. It is only the free silica which is harmful. A rational analysis of the material would average about :—

Quartz (free silica)	...	...	...	78%
Micaceous Matter	...	...	...	7%
Clay	...	...	...	15%

Millstone grit contains a variable quantity of micaceous matter ; ganister stone very little.

(4) *Chert*. Chert is found in various places in Derbyshire as veins or masses in the limestone, and is quarried in the neighbourhood of Bakewell. The smaller fragments are dressed into building stones at the quarries, but the greater bulk of the stone is sent unbroken, in large masses, to the Potteries in the Stoke district, where it is calcined and ground into fine powder for incorporation with Cornish stone and china and ball clays to form the material for white ware. Consequently, the greater part of the risk of silicosis from chert dust is transferred to Stoke-on-Trent.

Two Bakewell chert quarrymen died of Pulmonary Tuberculosis since the opening of the Tuberculosis Dispensaries: one, aged 45

years, in 1916; the other, aged 49 years, in 1925. There is no record of the presence of silicosis in either case. The age at death is somewhat suggestive.

(5) *Flint*. White sanitary and table ware is manufactured on a large scale in the extreme south of the County. My colleague, Dr. Nicholson, has published full accounts of cases of silicosis in this industry, and there are records of six cases at Burton Dispensary. The disease is due to the inhalation of flint dust from the ground flint, and the risk is said to occur chiefly in the "placing" of the articles on powdered flint in the "Saggars," and in the subsequent scouring of the ware after baking. This flint is not a Derbyshire product, but comes mainly from northern France, and the South of England.

(6) *Strippers and Grinders*. In the Glossop and New Mills districts occasional cases of silicosis are met with amongst "strippers and grinders," i.e. the workmen who clean and sharpen the card room machinery in the cotton mills. The disease is attributed to the inhalation of particles of silica dust from the abrasive used to sharpen the card teeth. Two cases which have come to my notice have been of a mild type.

Before leaving the subject of Silicosis, it is worth noting that in the re-modelled compensation scheme, admittedly based upon the South African procedure, introduced in 1925, workmen can be suspended from the scheduled silica industries for tuberculosis *unaccompanied* by silicosis. But, whereas, under the South African scheme such individuals are compensated for being deprived of their employment, in this country no such compensation is granted except silicosis is also certified to be present.

The removal, by the State, of an individual from his employment, with probable loss of his livelihood, because, through no fault of his, he developed tuberculosis, is, unless equitable compensation is given, a harsh procedure. It is to be hoped that British practice will be brought into line with that of South Africa in this matter at the earliest opportunity.

I have not worked out figures from the death registers for the deaths from tuberculosis and silicosis amongst Derbyshire gritstone masons for the five years since 1921. Eight fatal cases have come under my personal supervision during that time. My impression is, however, that considerable improvement is occurring in the conditions under which gritstone dressers carry out their work since the end of the war. The Mines Department is, I understand, insisting that the provisions of the Quarries Act of 1894 ("Special rules for the protection of persons employed in or about quarries working stone containing not less than 80% of silica") are enforced, and some, at least, of the firms carry out the sawing, planing, grooving and turning of the stone in a moist condition under running or dripping water. As regards the pocket silica sand industry, the outdoor workers in the sand pits have been exempted from the provisions of the compensation scheme. It appears somewhat paradoxical, however, that in the Peak of Derbyshire, the gritstone

cutters, the traditional victims of the "Stonemasons' disease," remain outside the Silicosis Compensation Scheme, while the pocket silica sand brickmakers, with their low phthisis death rate, and their comparative freedom from silicosis, have been brought within the ambit of its provisions.

SUMMARY.

It is a more agreeable task to collect and set forth facts than to draw conclusions. Facts are impersonal and objective; conclusions cannot help being to some extent personal and subjective. The conclusions which, I think, may legitimately be drawn from all the foregoing, can be best set out in tabular form as follows:—

DERBYSHIRE INDUSTRIES INVOLVING RISK OF SILICOSIS.

<i>Material.</i>	<i>Process.</i>	<i>Degree of risk of Silicosis.</i>
(1) Millstone Grit. (Fine quartz particles bonded with silica from aqueous solution).	Quarrying	Slight
	Sawing and Turning	
	(a) wet	Slight or nil.
	(b) dry	Considerable.
	Cutting and dressing (bench hands) ...	*Moderate.
	"Scabbling, Scutching & Wallstone knocking"	*Slight.
(2) Pocket silica sand. (Fine quartz sand with Kaolinitic coating, and Pendleside detritus, mixed with clay)	Raising and getting ...	Negligible.
	Mixing	*Slight.
	Grinding (wet)	Slight.
	Grinding or "pulverising" (dry)	*Considerable.
	Brickmaking	*Slight.
(3) Ganister stone. (Pseudomorphic quartzite)	Mining and quarrying ..	Considerable.
	Crushing and grinding	*Considerable.
	Brickmaking with lime	*Considerable.
	Brickmaking with clay...	*Slight.
(4) Chert.	Quarrying	Slight.
	Hammer dressing ...	Slight.
(5) Flint.	Whiteware setting and scouring	*Slight to moderate.
(6) Abrasive, and mineral dust found in raw cotton.	"Stripping and grinding"	Very slight.

*Varies with cubic space and ventilation of workshops, provision for dust extraction, etc.

COUNTY OF DERBY.

Appendix III.

Table of Deaths during the year 1926 in each of the URBAN Sanitary Districts, Classified according to Diseases.

URBAN SANITARY DISTRICT.	DEATHS FROM SUBJOINED CAUSES.																														Totals All Causes.				
	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Meningo- coccal Meningitis.	Tuberculosis of Respira- tory System.	Other Tuberculous Diseases.	Cancer. Malignant Disease.	Rheumatic Fever.	Diabetes.	Cerebral Hemor- rhage, etc.	Heart Disease.	Arterio Sclerosis.	Bronchitis.	Pneumonia (all forms).	Other Respiratory Diseases.	Ulcer of the Stomach or Duodenum.	Diarrhoea, etc. (under 2 yrs)	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Acute and Chronic Nephritis.	Puerperal Sepsis.	Other Acci- dents and Diseases of Pregnancy & Parturition.	Congenital Debility and Malformation including Pre- mature Birth.	Suicides.	Other Deaths from Violence.		Other Defined Diseases.	Causes ill-defined or unknown.	Polio- myelitis.	Polio- encephalitis.
ALFRETON	1	...	2	...	7	...	...	7	4	27	2	2	21	26	7	6	10	7	2	...	...	...	10	1	...	12	3	6	46	1	...	..	210
ALVASTON & BOULTON	1	...	...	...	...	6	...	...	1	3	1	...	4	..	...	...	...	1	...	...	...	2	...	1	1	1	...	..	22
ASHBOURNE	2	...	...	1	1	7	...	1	5	3	3	1	...	...	...	...	...	...	...	...	...	3	...	1	16	1	...	...	45
BAKEWELL	1	...	1	...	...	1	...	...	1	3	...	1	4	3	...	1	2	...	...	...	...	...	2	...	...	..	...	...	7	...	...	27	
BASLOW	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	4	
BELPER	1	1	2	2	...	...	8	1	19	...	2	6	19	2	3	3	3	1	...	1	2	5	...	...	10	1	1	29	...	...	1	123
BOLSOVER	1	...	...	1	...	1	...	3	7	13	2	1	4	11	1	4	12	2	...	...	1	...	2	...	...	12	2	4	22	1	...	...	107
BONSALL	1	...	...	...	...	...	...	...	...	1	...	...	1	5	2	...	...	...	...	...	...	...	...	...	...	2	...	...	2	...	...	14	
BRAMPTON & WALTON	1	2	...	1	...	...	2	2	1	..	...	...	5	...	2	...	...	...	...	...	...	...	...	...	2	...	...	7	1	...	...	26
BUXTON (Boro')	2	1	...	...	1	...	9	4	30	...	3	11	15	9	6	5	2	3	...	1	2	7	...	...	9	1	1	37	2	...	...	161
CHESTERFIELD (Boro')	1	...	10	5	3	10	8	5	...	45	19	71	4	8	44	96	13	45	70	10	2	7	6	3	12	3	2	69	5	27	136	2	...	...	741
CLAY CROSS	1	...	7	...	2	...	...	10	1	9	...	2	4	11	2	2	12	2	..	3	1	...	1	...	...	7	...	3	22	1	...	...	103
DRONFIELD	2	1	5	...	1	6	11	4	4	2	...	...	1	...	1	4	...	...	2	...	2	5	..	...	...	51
GLOSSOP (Boro')	2	3	8	...	...	14	5	34	...	4	16	31	9	29	18	2	1	2	1	3	6	2	2	10	5	12	57	1	...	1	278
HEAGE	2	...	...	...	1	...	4	1	1	4	8	...	...	3	...	...	...	...	...	1	...	...	1	...	...	4	...	...	30	
HEANOR	8	...	8	...	...	17	6	22	1	1	8	24	11	13	23	3	2	2	1	1	4	1	1	16	2	10	60	1	...	...	246
MILKESTON (Boro')	11	...	8	...	...	19	4	29	1	1	27	26	7	50	27	5	5	8	3	1	7	2	3	24	5	12	50	7	...	...	342
LONG EATON	3	2	2	1	...	20	6	35	2	7	16	26	6	15	12	5	1	3	5	1	7	1	...	11	1	2	62	3	...	...	255
MATLOCKS	1	...	1	...	4	...	...	6	3	8	...	1	17	12	5	8	10	1	1	...	..	2	4	...	1	6	2	5	39	1	...	...	138
NEW MILLS	8	2	...	2	...	7	1	...	12	8	9	4	5	2	...	1	...	...	3	...	1	4	3	1	25	2	...	...	100
NORTH DARLEY	2	...	...	...	1	...	...	2	...	4	1	1	3	6	...	1	...	...	2	...	...	...	2	...	...	4	1	3	5	1	...	...	39
RIPLEY	2	...	1	1	...	7	2	14	...	2	7	12	1	7	6	2	1	...	...	1	1	...	...	7	...	4	37	...	...	...	115
SOUTH DARLEY	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	6	
SWADLINCOTE	1	3	...	1	...	...	10	3	21	2	...	16	19	1	8	8	4	2	1	2	...	4	...	2	16	3	10	47	6	...	...	190
WIRKSWORTH	1	...	1	...	...	2	1	3	...	...	...	14	1	2	1	...	1	...	...	...	2	...	1	1	...	3	11	1	...	...	46
TOTAL OF URBAN DISTRICTS ...	1	...	18	10	48	18	67	12	...	188	71	374	17	39	233	396	96	211	233	50	24	28	22	18	84	10	13	231	34	108	730	33	...	2	3419

COUNTY OF DERBY.

Appendix IIIa.

Table of Deaths during the year 1926 in each of the RURAL Sanitary Districts, Classified according to Diseases.

RURAL SANITARY DISTRICTS.	DEATHS FROM SUBJOINED CAUSES.																														TOTALS					
	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Meningococcal Meningitis.	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Cancer. Malignant Diseases.	Rheumatic Fever.	Diabetes.	Cerebral Hæmorrhage, &c.	Heart Disease.	Arterio Sclerosis.	Bronchitis.	Pneumonia (all forms).	Other Respiratory Diseases.	Ulcer of Stomach or Duodenum.	Diarrhœa, etc. (under 2 years).	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Acute and Chronic Nephritis.	Puerperal Sepsis.	Other Accidents and Diseases of Pregnancy and Parturition.	Congenital Debility & Malformation (including Premature Birth).	Suicides.	Other Deaths from Violence.	Other defined Diseases.	Causes ill-defined or unknown.	Poliomyelitis.	Polio-encephalitis.	All Causes.	
ASHBOURNE ... ..	...	...	...	...	2	...	4	...	...	4	4	10	...	1	11	12	3	4	9	1	...	1	2	...	1	...	...	7	2	8	40	1	...	...	...	127
BAKEWELL ... ..	...	...	2	...	1	...	12	...	1	12	2	27	...	2	13	38	8	11	12	1	4	...	...	...	6	1	1	6	1	6	61	2	...	...	...	230
BASFORD ... ..	...	...	...	...	...	...	1	...	...	...	1	2	...	...	2	2	...	...	1	1	...	...	...	...	...	...	...	...	1	...	3	...	...	...	14	
BELPER ... ..	...	...	3	1	2	1	1	...	...	13	6	39	2	3	20	25	8	12	18	8	1	2	1	2	11	1	3	10	1	14	60	3	...	...	...	271
BLACKWELL	1	...	2	...	20	...	3	...	...	24	16	42	2	1	19	52	10	33	47	7	3	17	2	...	8	...	5	36	8	26	70	3	...	...	...	457
CHAPEL-EN-LE-FRITH ... ..	...	...	...	1	1	...	6	2	...	5	1	21	1	4	18	18	5	15	7	2	2	9	...	...	4	...	...	7	3	4	43	1	...	...	...	180
CHESTERFIELD ... ..	...	...	12	4	16	7	17	1	...	51	12	75	1	11	55	115	18	65	88	8	3	7	8	3	30	6	5	49	7	34	163	8	...	...	...	879
CLOWN ... ..	...	...	1	...	1	4	...	1	...	10	4	14	...	5	8	10	1	11	11	1	...	2	1	1	1	...	3	10	1	3	45	1	...	...	...	150
GLOSSOP DALE	1	...	...	...	...	...	...	...	...	...	1	6	...	1	...	7	5	4	2	3	...	...	...	...	1	...	1	2	1	2	20	1	...	...	...	58
HARTSHORNE & SEALS ... ..	...	...	3	...	...	...	2	...	...	2	1	13	...	2	8	11	1	6	3	1	1	1	...	1	3	...	...	6	1	4	20	2	...	...	...	92
HAYFIELD ... ..	...	...	...	...	...	...	1	...	...	3	1	6	...	1	5	5	2	1	6	1	...	...	...	1	1	...	...	3	2	1	8	...	...	...	...	48
NORTON ... ..	...	...	...	...	...	...	5	...	...	4	2	9	...	1	1	12	13	1	2	...	1	...	1	...	3	...	...	...	1	1	9	...	...	...	...	66
REPTON	1	...	1	1	1	1	1	...	...	4	1	24	...	1	16	18	6	5	6	2	2	...	3	1	8	...	4	7	...	10	36	...	...	...	...	160
SHARDLOW ... ..	...	...	...	...	4	4	7	...	1	17	6	45	...	5	21	53	7	18	19	1	1	1	4	2	7	...	1	18	2	9	82	5	...	...	...	340
SUDBURY ... ..	...	...	...	...	...	...	...	...	...	...	1	3	...	1	2	3	3	...	2	1	...	...	...	...	1	...	...	...	...	...	4	...	...	...	...	21
TOTAL OF RURAL DISTRICTS	3	...	24	7	48	17	60	4	2	149	59	336	6	39	199	381	90	186	233	38	18	40	22	11	85	8	23	161	31	122	664	27	...	...	...	3093

WHOLE COUNTY.

RURAL DISTRICTS	3	...	24	7	48	17	60	4	2	149	59	336	6	39	199	381	90	186	233	38	18	40	22	11	85	8	23	161	31	122	664	27	...	..	3093
URBAN DISTRICTS	1	...	18	10	48	18	67	12	...	188	71	374	17	39	233	396	96	211	233	50	24	28	22	18	84	10	13	231	34	108	730	33	...	2	3419
WHOLE COUNTY	4	...	42	17	96	35	127	16	2	337	130	710	23	78	432	777	186	397	466	88	42	68	44	29	169	18	36	392	65	230	1394	60	...	2	6512

